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ABSTRACT

Essays by education policy analysts discuss results of the 1985 NEA Conditions and Resources of Teaching (CART) survey, including an overview and appraisal of the survey results, their relation to other similar studies, and the potential for and projected costs of change in the allocation of resources for teachers. The first paper, by Samuel B. Bacharach and his colleagues (Scott C. Bauer and Joseph B. Shedd), offers an overview and appraisal of the CART survey by the research team intimately involved in the survey's preparation and evolution. The second paper, by Susan J. Rosenholtz, places the CART survey in the context of related scholarly literature. It is noted that the CART survey reinforces a conclusion reached independently by many other researchers: The social and organizational conditions in today's schools create many of the problems that undermine quality education. In the third paper, Charles S. Benson states that these conditions can be changed, and proposes a step-by-step plan designed to accomplish needed changes. The final paper, by E. Gareth Hoachlander, addresses the educational reform question regarding the economic ramifications of reform and provides examples of alternative strategies. The report concludes with an appendix that presents the survey's numerical data. (JD)

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CONDITIONS & RESOURCES OF TEACHING

A Special Report by NEA

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CONDITIONS & RESOURCES OF TEACHING

A Special Report by NEA

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Foreword

In 1985 the National Education Association conducted the first-ever national research survey on the working conditions that face teachers in America's schools. Nearly 1,800 randomly selected teachers—a broad and statistically compelling cross-section of the teaching profession—participated in this Conditions and Resources of Teaching (CART) survey, and their answers provide one of the most valuable sets of data ever available to educational researchers and policy makers.

What do the CART data tell us? How can we use this landmark research to improve the quality of American education? These are the primary questions asked and answered by the four analyses included in this special report.

NEA has collected these four essays from some of America's most thoughtful commentators on education. The first paper, by Cornell University professor Samuel B. Bacharach and his colleagues at Organizational Analysis and Practice in Ithaca, New York, offers an overview and appraisal of the CART survey by the research team intimately involved in the survey's preparation and evolution.

The second paper in this special report, by Susan J. Rosenholtz of the University of Illinois, places the CART survey in the context of related scholarly literature. The CART survey, Rosenholtz demonstrates, dramatically reinforces a conclusion reached independently by a host of researchers: The social and organizational conditions in today's schools create many of the problems that undermine quality education.

Can these conditions be changed? The University of California's Charles S. Benson is convinced that they can be, and his contribution to this special report proposes a step-by-step plan designed to accomplish needed changes.

In the fourth paper of this special report, E. Gareth Hoachlander, an economist at MPR Associates, Inc., Berkeley, California, addresses the educational reform question on every policy-maker's mind: Is change affordable? Hoachlander's answer is both practical and provocative.

We have concluded this special report on the CART survey with an Appendix that presents the survey's numerical data.

The results from the CART survey can be, we believe, an invaluable guide for all of us committed to excellence in education for each and every child. We welcome your consideration of the CART data for, in both the short- and long-term view, the only truly effective educational reforms are those firmly based on the evidence we have about what is happening in schools today—and what isn't.

August 1988

The Learning Workplace: The Conditions and Resources of Teaching

Samuel B. Bacharach, Scott C. Bauer, and Joseph B. Shedd

April 1986

Introduction

The education reform movement has been predicated on the assumption that the problem with America's schools is that teachers lack the motivation to teach. Most of the reform efforts enacted by state legislatures over recent years seek to motivate teachers to perform better. These efforts—merit pay and career ladders are two prime examples—are often highly politically attractive, but they fail to address the most critical obstacle to improving the educational system—the characteristics of the learning workplace. Only when we begin to examine the conditions that exist and the resources that are available in this workplace, will we be able to establish focused and strategic reforms that produce real and lasting improvement in America's schools.

The education reform plans adopted by many state legislatures advocate practices that the most successful private sector organizations have rejected for over 25 years. Indeed, many proposed education reform plans are inconsistent with the research on effective organizations and effective schools. Rather than creating the desired atmosphere of cooperation and productivity, these programs result in an atmosphere of conflict and competition.

Effective organizations are consistently evaluating and reevaluating the conditions of work. In education, we have tended to ignore work conditions, or to assume that problems with school work conditions have little effect on the quality of work. To date, few studies have tried to empirically identify the characteristics of teachers' work conditions and their consequences on the work of teaching. *This study represents the first national effort to empirically identify the specific problems teachers have with the work conditions of schools.*

Academic research and private sector experience have identified the following four basic elements of effective organizations:

1. Management defines goals, objectives, and priorities to guide decision making at all levels of the organization.
2. Management assures that organizational members have the resources they need to meet their responsibilities.
3. Management promotes communication and cooperation among organizational members.
4. Management guarantees that organizational members are involved in decision making.

This study on the conditions and resources of teaching (CART) sought to assess, through a series of survey questions given to a national sample of teachers, the degree to which these four principles guide our nation's schools. To the extent that they do not, we may conclude that school work conditions do not fully promote effective teaching.

In other words, this is the guiding question in this study: To what degree does the organization of work in schools allow teachers to perform as well as they can? The issue is not whether teachers are motivated to perform or whether they are capable of performing; the issue is whether teachers *can* perform, given the conditions of work and the resources provided to them to accomplish their work.

The empirical evidence in this report shows that—

1. Teachers do not feel that they are given the resources they need to carry out their jobs effectively.
2. Teachers do not have the opportunity to bring their professional expertise to bear in decision making.
3. Communication between teachers and building-level administrators is less frequent than desired.
4. Teachers feel that building-level administrators do not manifest the characteristics of supportive leaders.

This report also presents evidence to show that the conditions of work impact on both teachers' satisfaction and their commitment to teaching as a career. Based on the findings, we conclude that teachers are less satisfied and less committed to their careers when—

1. They experience conflictual expectations about their jobs.
2. Their roles as teachers are not well defined.
3. Administrators are critical and unhelpful rather than supportive.
4. They feel excluded from the opportunity to participate in decision making.
5. They are provided with insufficient resources to do their jobs.
6. The resources they receive are of an inferior quality.

Throughout this report, we offer recommendations for the direction of future reform efforts. We believe that following these empirically based recommendations can bring improvement and lasting change to education.

Theme 1: Job Resources

In the rush to embrace motivation as the principal element through which schools might enhance the quality of classroom instruction, education reformers have ignored the basic lesson of decades of research on organizational effectiveness: A job first must be properly designed before it can be performed effectively. To a large extent, the job design of the role of teacher determines just how effective an individual *can* be as a teacher.

A primary component of any job design is the assurance that incumbents are provided with the resources necessary to carry out assigned tasks. No matter how well-motivated people may be, lack of resources will prevent them from accomplishing their job responsibilities. In fact, a lack of resources often results in frustration and ultimately demotivates job holders. This is a problem especially among professionals where entry-level personnel typically begin their careers with both a high level of expectation and a high level of motivation to perform.

The lack of resources may lead to any or all of the following possible scenarios:

1. *Teachers become scavengers.* Teachers will spend disproportionate amounts of time to mobilize the resources they need to perform their jobs effectively. In extreme cases, collecting resources becomes a goal in itself.
2. *Teachers use make-shift techniques.* Rather than search for resources, teachers will do without and will come up with alternative ways to accomplish their tasks. Task completion becomes the goal; quality suffers.
3. *Teaching becomes de-professionalized.* Over time, teachers see the lack of resources as an evaluation of their abilities and a not-too-subtle message about the school's recognition of their status.

The end result of these scenarios is a disenchantment with teaching. Lack of resources limits teachers' creativity and ability to do their jobs in a manner that satisfies them. This sense of self-satisfaction with one's own performance is the prime motivating agent in any profession, and it is especially critical in a profession that is as low-paying as teaching.

Lack of resources has a direct impact on teachers' ability to perform and indirectly affects teacher motivation and satisfaction. Indeed, we may expect lack of resources to be linked to such work consequences as stress and burnout. With reformers' compulsion to focus on teacher motivation as a primary predictor of excellence, it is indeed strange that no attention has been given to the issue of job resources.

The Resources of Teaching

A resource may be thought of as anything needed to perform a job. Each position should be provided with the resources necessary to fulfill the assigned job responsibilities. The failure to provide these resources has a direct and immediate impact on a job incumbent's ability to perform the job, and, ultimately, the lack of resources results in serious personal consequences such as dissatisfaction, lowered commitment to the job, and stress.

The resources necessary to perform the job of teacher may be grouped into the following five categories:

1. *Authority.* Every job requires that decisions be made to complete the tasks assigned to the position. The right to make those decisions is authority. The authority structure of the organization—i.e., who has the right to make what decisions—is a critical component of an examination of resources. Theme 2: Decision Making, addresses this issue.
2. *Time and Space.* Each teaching responsibility requires a certain amount of time to fulfill. It is quite possible to assign a mixture of responsibilities that cannot be fulfilled in the time allotted. In this situation, time becomes a scarce resource and either more time must be allotted or responsibilities must be adjusted. In the CART study, five time-related resources are investigated: time for counseling; time for grading; time for planning; time for instruction; time for workshops.

   Space is a necessary resource in the job of teacher. Where adequate space is unavailable, job-related problems may occur. Three space resources are included in this report: storage space; activity space; classroom space.
3. *Human Support.* Few jobs exist in isolation. Teachers must coordinate their activities with others in order to ensure task completion. For teachers, human support may be thought of as both advice and feedback and assistance. The CART study includes questions about—
   - Advice and feedback from administrators.
   - Advice and feedback from other teachers.

- Advice and feedback from other staff specialists.
- Advice and feedback from formal evaluations.

In terms of assistance, the following teaching resources are studied:

- Assistance from administrators.
- Assistance from staff specialists.
- Assistance from clerical staff.
- Assistance from custodial staff.
- Assistance from teacher aides.
- Assistance from other teachers.

4. *Equipment, Supplies, and Materials*. Many teaching activities require the use of various pieces of equipment. The success of these activities depends on the adequacy of the equipment involved. Most teaching responsibilities also depend on adequate supplies and materials. These resources are covered in the CART survey by questions on—
   - Classroom supplies.
   - Audiovisual materials.
   - Audiovisual equipment.
   - Textbooks.
   - Workbooks.
   - Other published matter.
   - Money to purchase supplies.
5. *Knowledge, Skills, and Information*. Collecting, storing, and transmitting information is a critical component of many jobs. In teaching, access to quality information is essential to continued job performance. In this study, the following knowledge-related resources were surveyed:
   - Staff development opportunities.
   - Information from standardized tests.
   - Information from student files.
   - Information from teachers' own files.

Teachers also were asked to rate existing sources of knowledge and skills as providers of the knowledge and skills teachers need to be effective.

Resource-Related Problems of Teachers

The CART study directly addressed the issue of job resources by asking teachers how often the *insufficient quantity* and the *inadequate quality* of resources make it difficult for them to perform their jobs. Framing the CART survey questions in terms of resource-related problems enables us to detect deficiencies in the design of the job of teacher. Such questions help us to discover which job resources are most problematic and then to suggest ways to correct these resource inadequacies.

Time and Space

Time

> "I'm tired of people thinking I have a 9 to 3 job."
>
> "Considering all the things I have to do, sometimes I think that I don't have the time to do any *one* of them effectively."
>
> "It seems that administrators only count the hours teachers spend in the classroom as *real* time."

One of the primary characteristics of an effectively designed job is that the incumbent is given enough time to complete the responsibilities associated with the job. In professions such as teaching, the incumbent typically has discretion over how responsibilities are distributed over time. Time is an especially important resource in jobs in which day-to-day activities vary greatly and in which problem solving is a major component. The provision of enough time to perform varied tasks and the discretion to allocate time for task completion are both essential to the success of these jobs. Teaching is such a job.

Findings

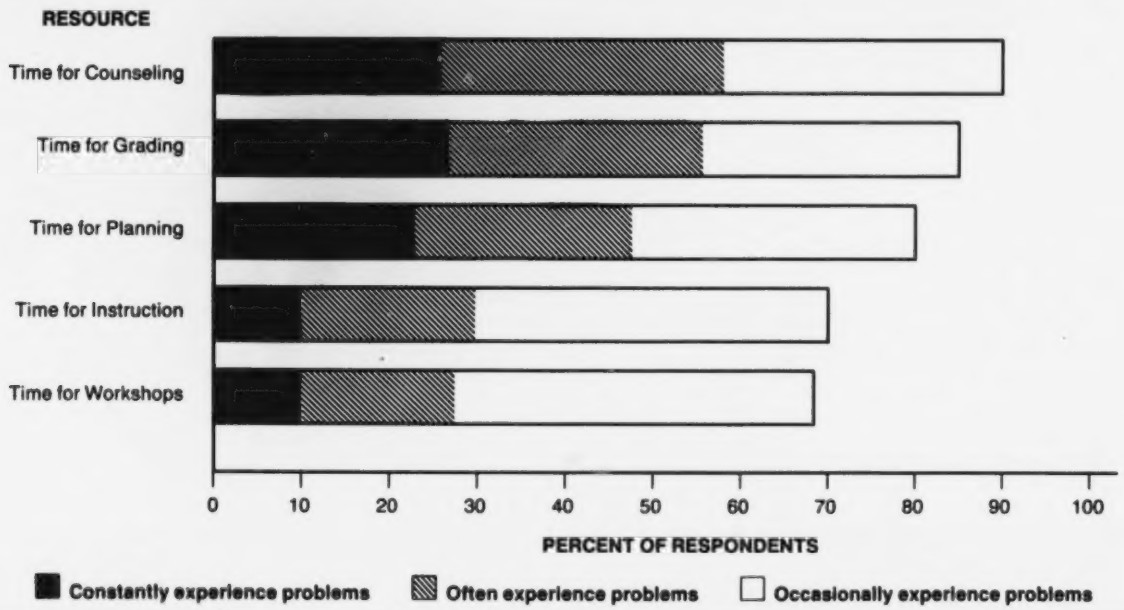
Chart 1 clearly demonstrates the importance of time to teachers. Over 60 percent of teachers report that, at minimum, they have occasional problems with time. Over 25 percent of the respondents constantly experience problems with time for counseling and time for grading, and over 23 percent constantly have problems with the quantity of time they have for planning activities. And nearly 10 percent of teachers constantly experience problems with time for instruction because of insufficient quantity of time. Another 20 percent often experience such problems, and 40 percent occasionally experience problems. A total of about 70 percent of the respondents, then, experience problems with time for instruction.

Implications for Reform

Clearly, teachers are experiencing a large number of problems related to time as a resource. These problems occur not only in such primary activities as instruction, counseling, and grading, but also in planning and other support activities. Large numbers of teachers do not have enough time to pursue developmental activities such as attending professional workshops and conferences.

These findings imply that we must account for the limited amount of time teachers have to perform their

CHART 1.
QUANTITY OF TIME CREATES PROBLEMS FOR A LARGE PERCENTAGE OF TEACHERS



many varied job responsibilities. In terms of designing the job of teacher to be more effective, the following must be taken into account:

1. The number of activities required of teachers.
2. The number of students each teacher must teach.
3. The amount of time teachers have available to them to complete their responsibilities.

Space

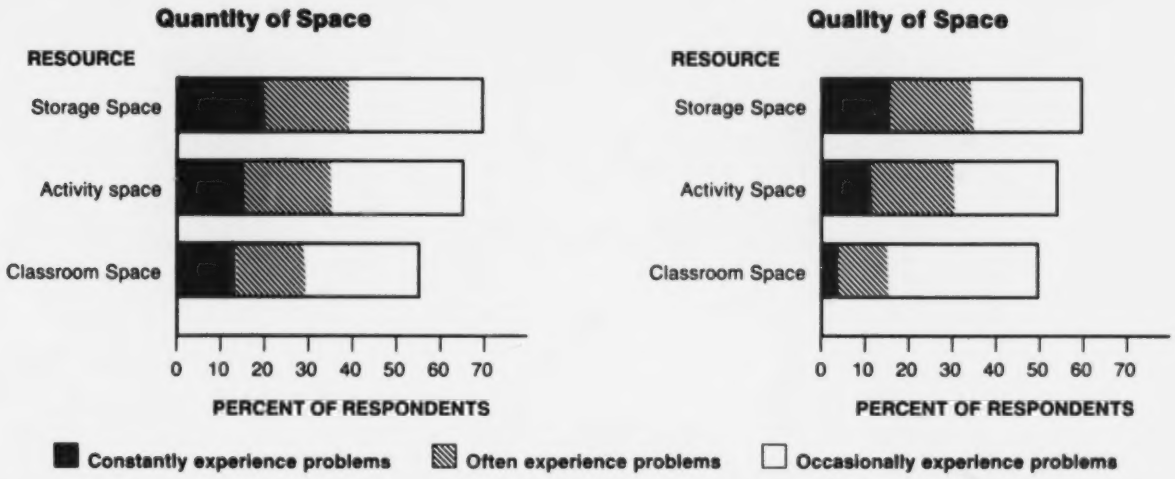
> "It's hard to teach in a storage room."
>
> "I'd like to provide more one-to-one instruction, but in this classroom you can't do that without disrupting the rest of the class."

One might imagine that with all of the school building closings over the past decade, space would no longer be a critical issue. But space has too often been treated only as the number of buildings available for use or the number of classrooms in a building. Space as a resource is a much more complex issue. When teachers talk about space, they are typically talking about their immediate work area. For teachers, space includes not only classroom space, but also storage space and the space available for special activities. In teaching, space is an especially important resource, since the maintenance of a proper learning environment implies the flexible use of space. Teachers must be free to organize classroom space in a variety of ways (e.g., for individual instruction, for small-group work, for lectures). Teachers also require a variety of types of space for special activities. In this sense, both the quantity of space and its quality are important.

Findings

Chart 2 shows that nearly half of the respondents to the CART survey have at least occasional problems with the quantity and quality of storage space, activity space, and classroom space. Storage space and activity space are particularly critical elements. Over 20 percent of the respondents constantly have quantity-related problems with storage space, and over 15 percent constantly find storage space to be of insufficient quality to meet their needs. Quantity of special activity space is constantly a problem for nearly 16 percent of the survey respondents, and another 20 percent often experience problems. Quality of special activity space is constantly problematic for 12 percent of the respondents, and another 18 percent find it occasionally troublesome.

CHART 2.
RESOURCE PROBLEMS—Quantity and Quality of Space



Implications for Reform

Teachers can hardly be expected to obtain peak performance if they must deal with space-related problems. Additional storage, activity, and classroom space is a part of the answer, but responses indicate that the quality of space also must be addressed.

In terms of the design of the job of teacher, then, we must account for—

1. The amount of different types of space needed by teachers.
2. The number of students each teacher must deal with in a given area of space.
3. The quality of different types of space, in terms of matching space available with teachers' needs for space.

Human Support

> "My principal always sticks his two cents in when it's not needed, but when I need a minute he's never available."
>
> "If I didn't have to type my own tests, maybe I'd have more time to grade them!"
>
> "Teacher 'aide' is a misnomer!"
>
> "I can never get help by asking for it once—to get the help I need, I have to ask 50 times!"

Human support involves two components: (1) advice and feedback, and (2) assistance. Teachers need advice and feedback including new ideas and suggestions from others as well as evaluations of their own activities. Teachers also need assistance from others in the completion of tasks.

Human support is an important resource for teachers. Indeed, the nature of education makes such support essential. Education does not take place in the isolation of a single classroom: it takes place in schools. Teachers rely on other teachers to prepare students for learning, and over time a student passes through many classrooms. On a day-to-day basis, teachers rely on the assistance of a variety of agents and to be effective, they must receive this assistance.

Teachers also rely on the advice and feedback from people in a variety of jobs. Teachers daily must diagnose special situations as they occur, and, in this regard, advice from specialists is particularly critical. A teacher cannot be a "jack-of-all-trades—master of none." In order to service the special needs of students, teachers must look to others for assistance and guidance.

Findings

Charts 3 and **4** show that respondents report fewer problems with human support resources than with time and space resources. About 50 percent of teachers have

at least occasional problems with the quantity and quality of assistance from building-level administrators, staff specialists, and custodial staffs, but assistance from other agents is not as problematic. Even in these cases, only between 5 and 10 percent of the respondents have problems with assistance constantly. A finding worthy of note is that teachers seem to have constant problems with the *quantity* of assistance from teacher aides. Over 12 percent of all respondents fall into this category. Apparently either more aides are needed or the work activities of existing aides need to be focused more on assisting teachers.

CHART 3.
RESOURCE PROBLEMS—Quantity and Quality of Assistance

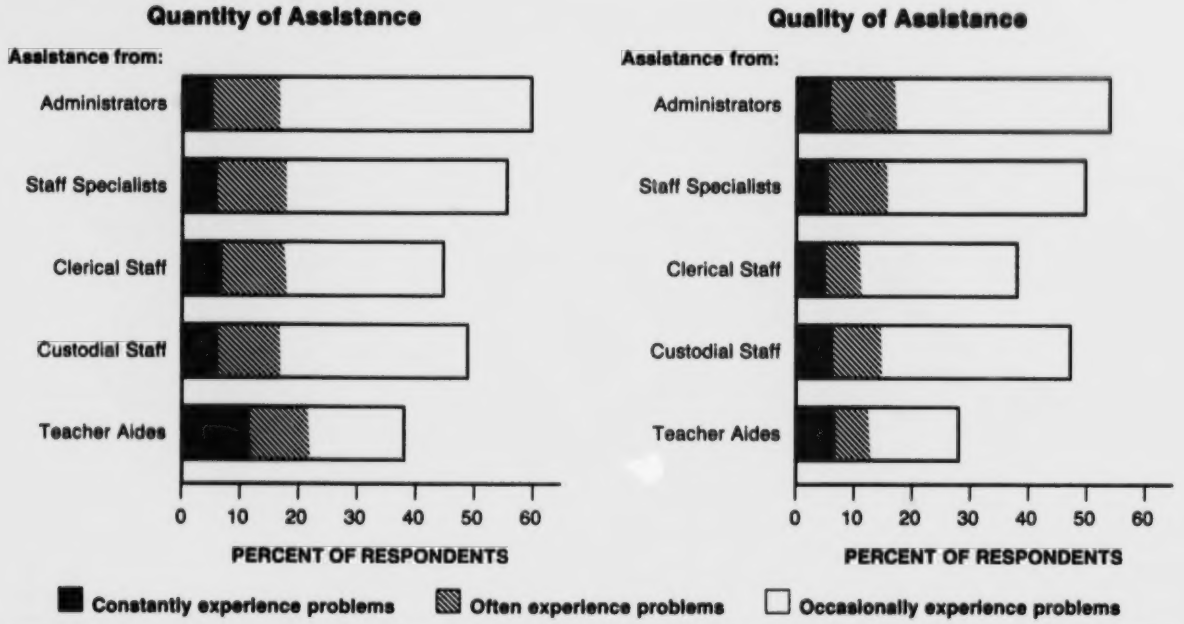
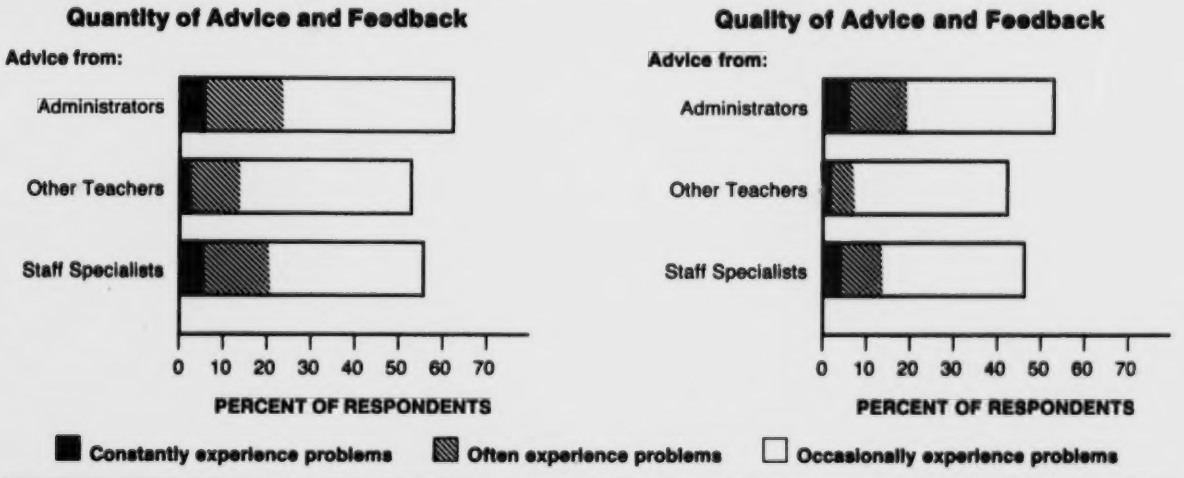


CHART 4.
RESOURCE PROBLEMS—Quantity and Quality of Advice and Feedback



The results for advice and feedback resources are similar, but a greater percentage of teachers have at least occasional problems obtaining advice and feedback from administrators and staff specialists. About 7 percent of teachers constantly experience problems with quantity *and* quality of advice and feedback from building-level administrators, and nearly that percentage experience these problems with specialists. Fewer problems are experienced in terms of advice and feedback from other teachers, although about half of the respondents have at least occasional problems with quantity and about 40 percent have problems with the quality of this resource.

Implications for Reform

Teachers must be able to rely on others for assistance and counsel if the job of teaching is to be effective and if individual teachers are to grow professionally. Assistance appears to be more problematic than advice and feedback, although the percentages of teachers experiencing problems are not dramatically high. But in judging the importance of these findings, one must ask: Is it acceptable to expect 5, 7, or 10 percent of all teachers to do without adequate support from other agents in their school? Can teachers perform the duties of administrators, specialists, and custodians *and* still be as effective in their own jobs as they can be?

It may be the case that small percentages of teachers have problems with human support, or it may be that respondents merely have become accustomed to doing not one, but two or three jobs themselves. In any case, the effect on the quality of education may be staggering. To avoid these consequences we must—

1. Provide adequate support services for teachers in terms of the quality and quantity of assistance.
2. Create mechanisms that permit enhanced communication between teachers and other agents for the purpose of allowing them to seek and obtain advice and feedback.
3. Monitor the training and assignments of aides and other support staff to be sure that the type of assistance available to teachers matches their needs.

Equipment, Supplies, and Materials

> "I don't mind waiting for things like colored paper, but more often than not I have to buy things like that myself if I want to use them in class."
>
> "By the time the film I ordered on Gettysburg came in, we were studying the Cold War!"

When we think of resources, we automatically focus on equipment, supplies, and materials. More often than not the two are equated, and factors like assistance, space and time, and knowledge are ignored. At a certain level, equipment, supplies, and resources represent the most basic tools of teaching. Each classroom is outfitted with textbooks, workbooks, chalk and erasers. Creative teaching requires these resources to be available in appropriate quantities and qualities.

Findings

Chart 5 shows that at least 40 percent of all respondents occasionally experience problems with the quantity and quality of equipment, supplies, and materials. However, fewer than 10 percent of teachers report constant problems with any of these resources *except* for money for supplies. About 15 percent of the teachers responding constantly experience problems obtaining money for supplies, and another 20 percent often experience this problem. This implies that teachers have difficulty obtaining special supplies even when they are willing to obtain them themselves.

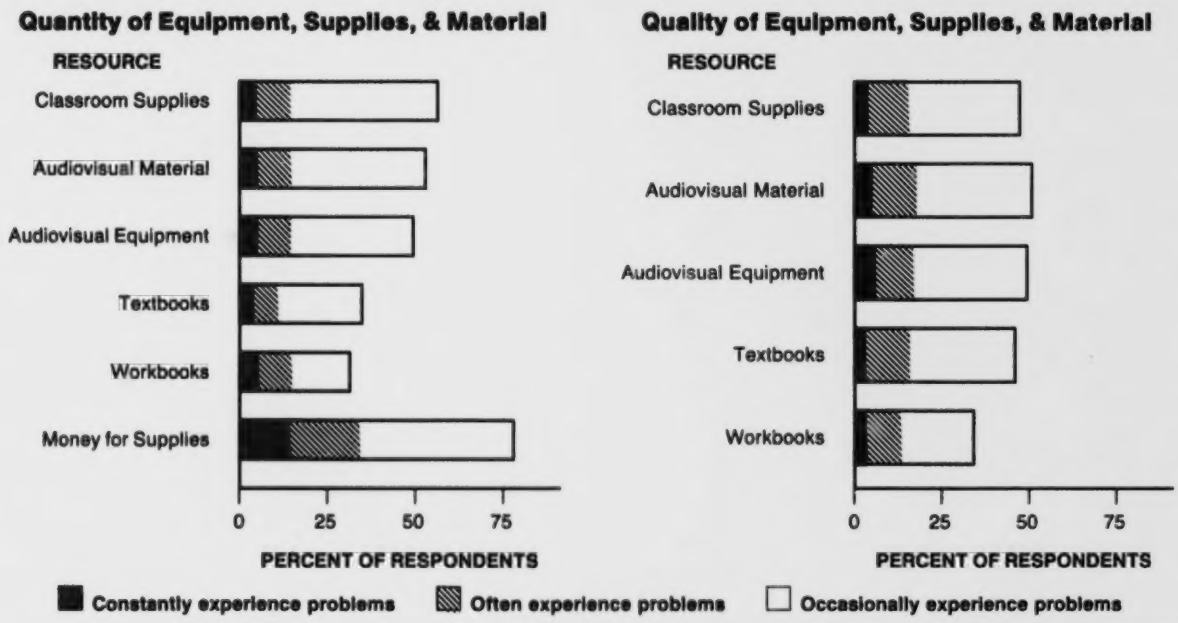
Implications for Reform

Problems with the quantity and quality of all categories of equipment, supplies, and materials are few, based upon the survey results, except for the category involving obtaining money to purchase supplies for special purposes. Either teachers are by and large getting the supplies they need to perform their jobs, or they have become accustomed to receiving less than they need and they have accordingly adjusted their methods to account for this.

Once again, however, we must raise the question of whether it is acceptable to have 10 or 15 percent of our nation's teachers often or constantly experiencing problems with the quantity and quality of a resource. As compared to other resources, it is relatively easy for schools to take steps to assure the adequate provision of equipment, supplies, and materials, and in many senses it is the very least that schools can do to promote effective teaching. Teachers should not have to "make do" with what they have available or have to purchase supplies themselves. Their schools should provide them with the tools they need, in a timely fashion, so that they may do the best jobs they can. Thus—

1. Schools must provide ample quantities of equipment, supplies, and materials.
2. These resources must be of appropriate quality so that teachers can use them without apprehension about their safeness or durability.
3. Schools should maintain adequate funds for the purchase of special supplies and materials so that teachers need not restrict their methods to those that can be used with "whatever's around."

CHART 5.
RESOURCE PROBLEMS—Quantity and Quality of Equipment, Supplies, & Material



Knowledge, Skills, and Information

One definition of effective teaching is the skilled transfer of knowledge and information to students. All schools expect their teachers to have an adequate base of knowledge in their specializations. Schools also expect qualified teachers to have mastery of those skills that are critical to the art of teaching.

A great deal of attention has been placed on the knowledge and skills of entry-level teachers. But it is seldom understood that teachers begin their careers with only a core of knowledge and skills. Truly successful teachers are those who are constantly developing and building on this core throughout their careers. In this context, schools must provide opportunities for staff development and support the continued training and education of teachers.

Findings

About 7 percent of the respondents to the CART survey experience problems with the quantity and quality of staff development opportunities provided by their schools. Another 14 to 15 percent often experience such problems, and about 33 percent occasionally have problems. In total, then, over 50 percent of the teachers experience problems with the quantity and quality of development activities, a finding that warrants considerable attention if we are to be concerned with the quality of teaching.

Implications for Reform

Something is wrong with the development opportunities provided by schools for their teachers. While half of our teachers are experiencing problems with this resource, we can hardly expect them to be effectively developing their core of teaching knowledge and skills.

One of the reasons that development may be so problematic is that professional development opportunities take inappropriate forms. In a very real sense, teacher development programs are structured on nonempirical assumptions about the best sources for development.

The CART survey provides the empirical data long needed. The survey asked teachers to rate the effectiveness of a variety of sources of job-related knowledge and skills. **Chart 6** shows some provocative responses to this question. Far and away the most effective source of job-related knowledge and skills is experience. Consultation with other teachers and the observation of other teachers rank second and third, with about half of the respondents deeming these "definitely effective" sources. Study and research pursued by teachers on their own ranks fourth, with about 46 percent of the respondents rating this "definitely effective."

Teachers also rate courses and contacts in their academic specialty highly: Between 30 and 40 percent of the respondents rate these as "definitely effective" sources of knowledge and skills.

In contrast, two traditional professional development activities regularly promoted by schools, in-service training and attendance at conferences and workshops, are rated as effective sources by relatively few teachers. Only 13 percent of the respondents find in-service training programs provided by their schools as "definitely effective," and 24 percent find professional conferences and workshops effective.

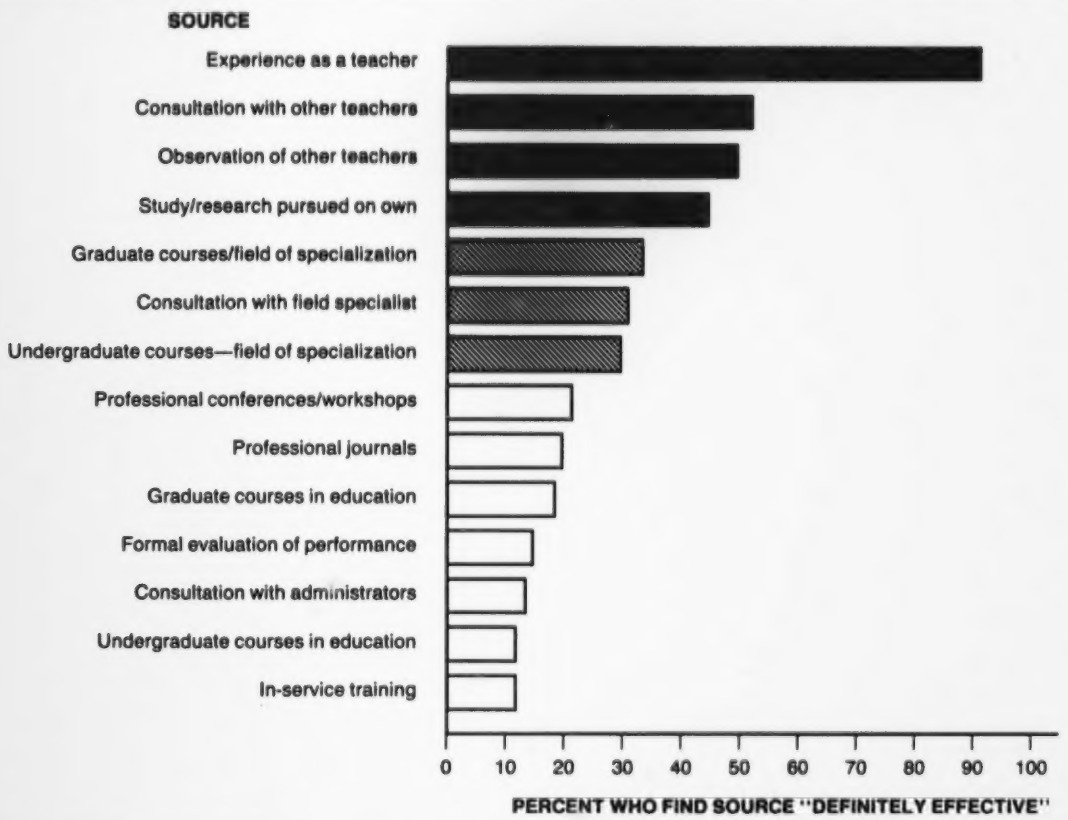
Apparently, teachers do not feel that their administrators are effective sources of knowledge and skills either. Only 15 percent rate "consultation with administrators" as "definitely effective," and 16 percent rate formal evaluation as effective.

These findings suggest that we must reassess the mechanisms through which professional development is achieved. Reliance on workshops and in-service training, at least as they exist today, simply does not appear to be effective enough. Considering the millions of dollars spent on development each year, these findings suggest that more creative mechanisms are needed. A wider array of development programs would be more appropriate, relying on the more effective sources of knowledge and skills.

To assure that teachers are afforded the best chances to continue to acquire knowledge and develop skills throughout their careers, we must—

1. Provide entry-level teachers with an internship period during which they can accumulate knowledge and skills through experience.
2. Develop the mechanism to permit increased levels of interaction among teachers and encourage these activities.
3. Take positive steps to legitimize increased interaction among teachers by developing peer-assistance programs.
4. Provide teachers with study and research sabbaticals and increase tuition support for these purposes.

CHART 6.
"EFFECTIVE" SOURCES OF JOB-RELATED KNOWLEDGE AND SKILLS



Theme 2: Decision Making

Organizational effectiveness is directly linked to how well individuals in an organization make decisions. In every organization, decisions are made daily about the conduct of work, the distribution of resources, and short-term goals. Less frequently, decisions are made about the mission of the organization, the use of buildings and facilities, and the assignment of staff. Who makes these decisions is governed by the organizational structure and the kind of behavior exhibited by leaders.

Research has shown that in effective organizations, decision making is typically a decentralized process. A highly participative decision-making process yields more complete and accurate information upon which to base decisions. That is, employee participation gives managers access to the critical information from which management is typically divorced on a day-to-day basis. Furthermore, because participation gives employees an opportunity to be involved in problem solving, they become more committed to the solution chosen, and might work harder to achieve desired results.

Increased participation enhances the degree of consensus existing in an organization and provides employers with a high level of information about the goals and objectives of the organization. Over time, researchers maintain, participation results in higher levels of satisfaction, increased cooperation, lower levels of turnover and absenteeism, and reduced stress.

Alternatively, a highly centralized decision-making system where few individuals retain control over organizational decisions might breed suspicion, contempt, and a general dissatisfaction with work. Particularly in organizations populated with professionals or highly skilled individuals, powerlessness and lack of control over the work environment may be demoralizing and eventually might lead to the collapse of the generally innovative, almost entrepreneurial spirit professionals bring to their jobs. The malaise and dissatisfaction that results, needless to say, can have a devastating impact on the overall quality of an organization.

Decision Making in Schools

Given the importance of the decision-making structure to organizational effectiveness, it is bewildering that education reformers have not dealt extensively with this topic. Teachers, as professionals, should be highly involved in the decision process in schools if peak quality is to be attained. In particular, teachers should be highly involved in goal-setting, in decisions concerning the work processes in schools, and in decisions governing resource use and allocation. As experts and holders of the most accurate information on the education process in their organizations, teachers should be given the chance to contribute through their involvement in decision making. Such involvement would make for effective change and growth toward excellence.

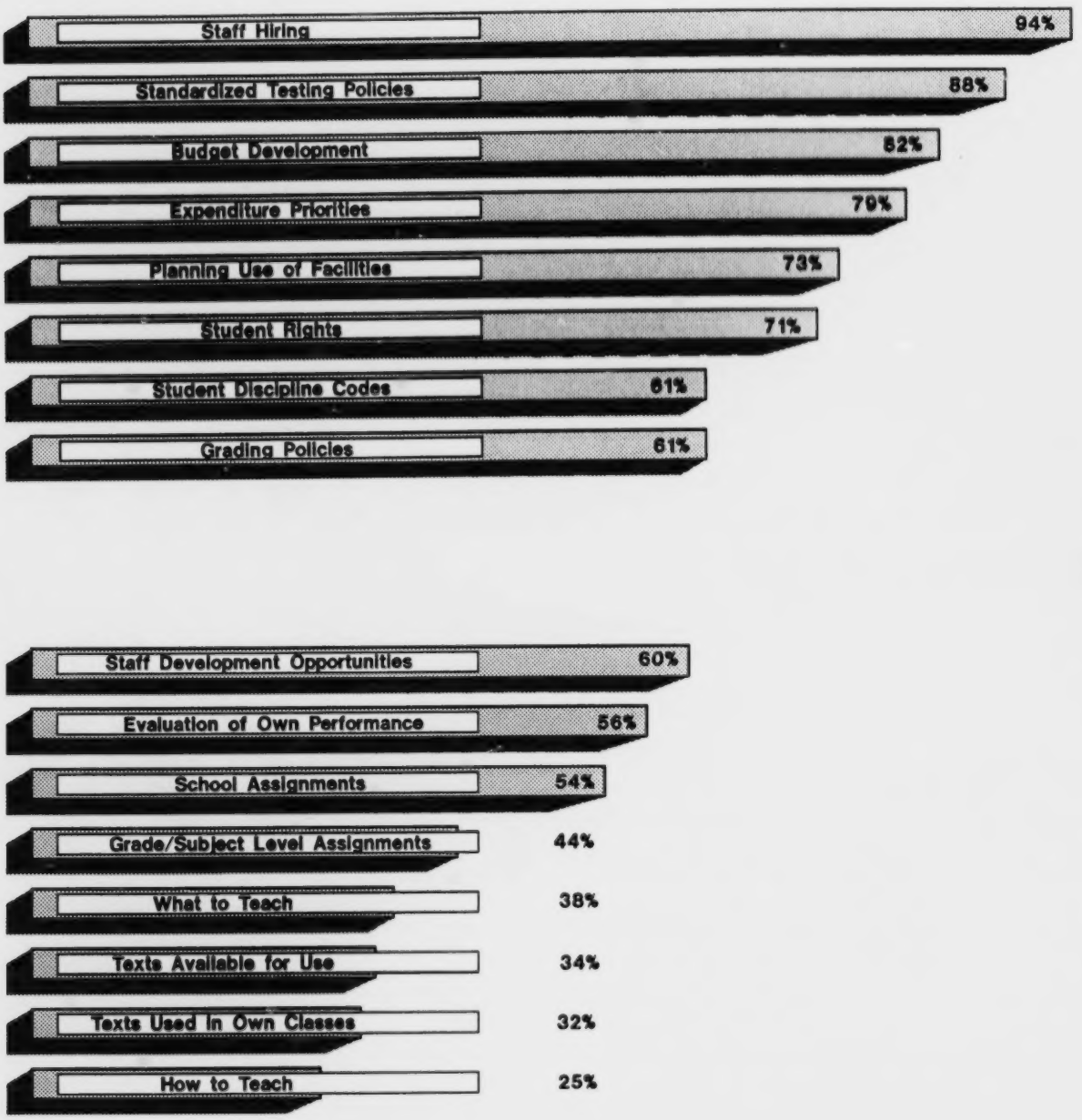
Opportunity to Participate in Decision Making

The CART survey examined the extent to which teachers actually have the opportunity to participate in decisions. Teachers were asked to describe how often they have the opportunity to participate in decisions. The decision areas surveyed fell into the following five groupings:

1. Organizational policies
   - Staff hiring
   - Standardized testing policies
   - Budget development
   - Expenditure priorities
   - Planning use of facilities
2. Student-teacher interface
   - Student rights
   - Student discipline codes
   - Grading policies
3. Teacher development and evaluation
   - Staff development opportunities
   - Evaluation of own performance
4. Work allocation
   - School assignments
   - Grade/subject-level assignments
5. Teaching process
   - What to teach
   - Texts available for use
   - Texts used in own class
   - How to teach

Chart 7 displays a summary of the results on the question of the degree to which teachers have the opportunity to participate in decision making. Specifically, the chart shows the percentage of teachers who "seldom or never" and "occasionally" have the chance to participate in the decision-making process.

CHART 7.
TEACHERS HAVE A LIMITED OPPORTUNITY TO PARTICIPATE IN DECISION MAKING



Numbers refer to the percentage of teachers who "seldom or never" or "occasionally" have the opportunity to participate in decision making.

Very few teachers feel that they have more than an occasional chance to participate in decisions or organizational policies. At least 75 percent of the respondents feel that they have little chance to participate in decisions in all five areas; as many as 94 percent feel this way in regard to staff-hiring decisions. This may not seem alarming since the organizational policy issues are often thought of as traditional management issues, but recall that teachers were not asked to indicate how often they had sole discretion over decisions or sanctioned authority to make decisions. They were merely asked how often they have a chance to participate. In this light, it seems that teachers are given extremely little opportunity to exercise their influence on basic school decisions.

On the next two decision groups surveyed, the student-teacher interface and teacher development and evaluation, more than half of all respondents report little chance to become involved in decision making. Over 70 percent have no more than occasional input into student rights decisions, and over 60 percent feel that they seldom or occasionally get the chance to be involved in decisions on student discipline codes and grading policies. Nearly 60 percent have little chance to influence decisions on staff development opportunities, and about 56 percent feel relatively uninvolved in decisions regarding evaluation.

On work allocation issues, teachers appear to be more involved in decision making, although 44 percent feel uninvolved in grade/subject-level assignments and 54 percent feel little chance to be involved in the making of school assignment decisions. The results on teaching process decisions are more disconcerting. Teaching process issues are directly related to the day-to-day activities of teachers. Yet about 25 percent of the respondents have only occasional chances to be involved in decisions about how to teach, and nearly 40 percent are only occasionally involved in decisions about what to teach. This is quite surprising.

Decisional Deprivation

Examining the actual levels of teacher involvement in decision making, as we did in the previous section, is one way to determine whether teachers have appropriate opportunities to participate in school decision making. But it is more useful to examine *decisional deprivation*. Decisional deprivation is the difference between the amount of involvement in decision making teachers feel they *should* have as compared to the amount of involvement they feel they *actually* have. The resulting measure is the amount of involvement teachers feel that they are deprived of having. Examining decision deprivation measures allows us to directly assess teachers' sense of powerlessness and gauge the likely impact of decision-making practices on effectiveness.

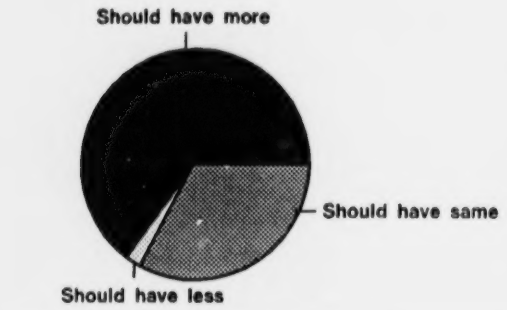
Chart 8 shows the percentage of teachers who feel that they should have more of an opportunity to be involved in decision making, the percentage who feel that their involvement is appropriate as it is, and the percentage who feel that they should have less of a chance to participate in decision making. For the first group of issues, organizational policies, at least 63 percent of the respondents report that they should have more of a chance to participate in decision making on each issue. Nearly 84 percent want more of a chance to influence decisions over standardized testing policies while only about 14 percent feel that their current situation is appropriate. About 73 percent of the respondents want more involvement over expenditure priorities, 70 percent desire more participation on budget development, 65 percent want more involvement on designing and planning the use of facilities, and 63 percent want more input on staff hiring. Few teachers desire *less* of a chance to participate on any of these issues.

On issues in the student-teacher interface group, over 70 percent of the respondents want more of a chance to participate in decisions. Roughly 25 percent of the respondents feel things are appropriate as they are, and only 3 or 4 percent desire less decision-making involvement.

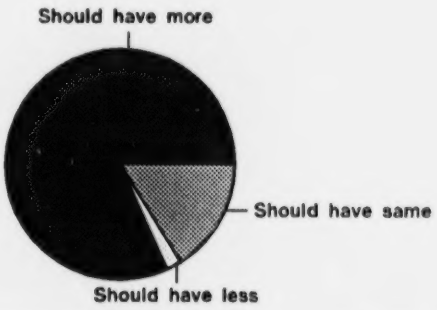
The findings on staff development and evaluation issues again show that teachers prefer to be more involved in decision making. About 70 percent of teachers desire more involvement in staff development opportunities, and 63 percent want more involvement in evaluation of their own performance. About 25 percent of teachers are happy with their current involvement in staff development decisions, and about 33 percent are satisfied with their involvement in evaluation.

The CART survey found similar results on work allocation and teaching process issues, although a much larger percentage of respondents consider their level of decision making appropriate for these issues. Over 55 percent of teachers desire more participation in decisions on assignment issues, and nearly 60 percent desire more say in issues concerning what to teach. Nearly 40 percent consider their current involvement sufficient in these areas, and half of the respondents find their involvement in decisions concerning how to teach at an appropriate level. About half of teachers want more decision-making involvement in decisions revolving around the texts available for use and texts used in their own classes.

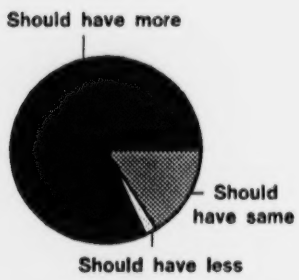
CHART 8.
SHOULD TEACHERS HAVE MORE, THE SAME, OR LESS OF AN OPPORTUNITY TO PARTICIPATE IN DECISION MAKING?



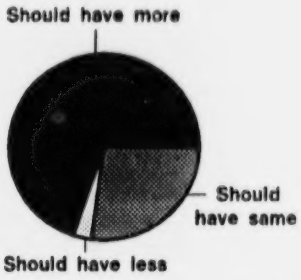
Staff Hiring



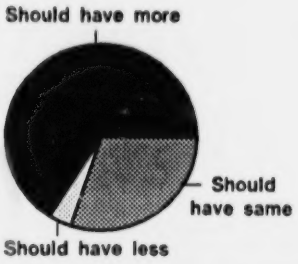
Standardized Testing Policies



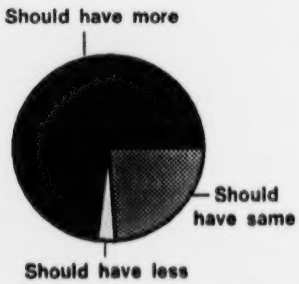
Expenditure Priorities



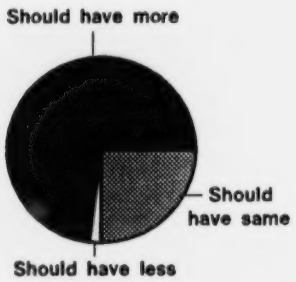
Budget Development



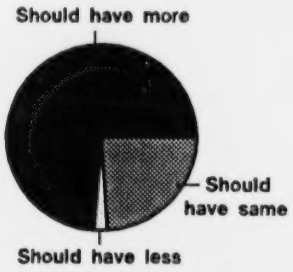
Designing and Planning the Use of Facilities



Student Discipline Codes

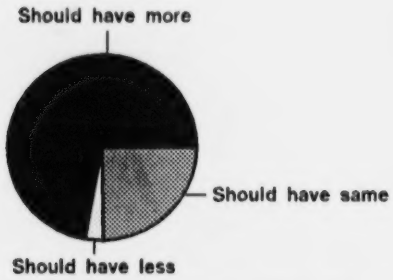


Student Rights

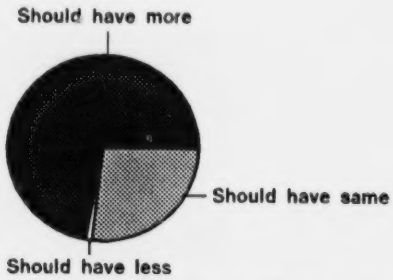


Grading Policies

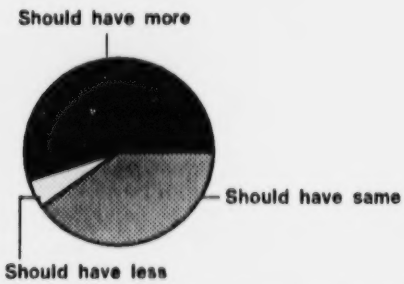
(Continued on page 23)



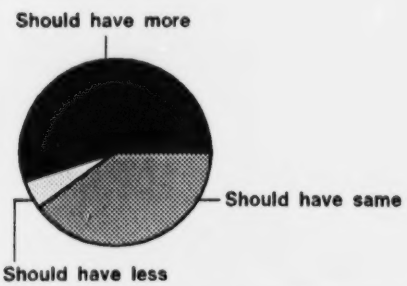
Staff Development Opportunities



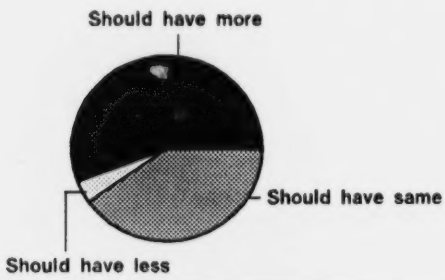
Evaluation of Own Performance



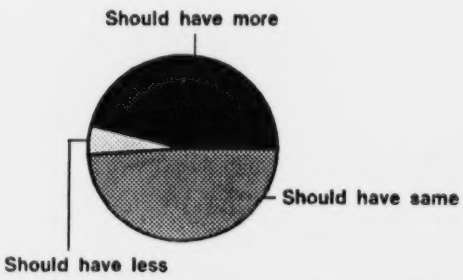
School Assignments



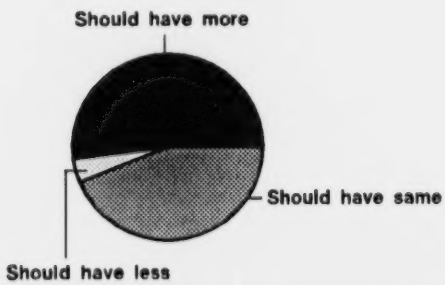
Grade Level/Subject Assignments



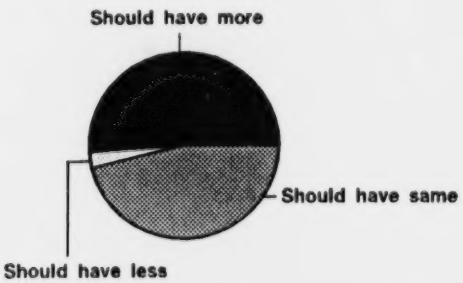
What to Teach



How to Teach



Texts Available for Use



Texts Used in Own Classes

In sum, the decisional deprivation results demonstrate convincingly that teachers feel that they should have considerably more of a chance to be involved in decision making. Substantially fewer teachers find their current opportunities to be involved in decision making appropriate, and relatively insignificant percentages of teachers feel saturated with opportunities to get involved.

Implications for Reform

Whenever questions of teacher participation in decision making are raised, school management seems to react in one of two ways. First, there is the "caring administrator" reaction, epitomized by the administrator who contends that teachers already have so much to do that they do not want to be bogged down with decision-making responsibilities. Alternatively, the "paranoid administrator" reacts by assuming that teacher involvement somehow denies management its decision-making authority.

Data presented in this section demonstrate that, in reality, teachers do desire more involvement in decision making. These data directly refute the management assumption that teachers themselves do not want to be involved in school decision making.

However, the data cannot directly address the assumption that teacher involvement usurps management authority. But it is not the case that increasing teacher involvement means a loss of management discretion over a final decision. Instead, increasing teacher participation might enhance managerial effectiveness by giving managers more information upon which to base decisions.

Increased participation does imply that more people will have an opportunity to observe and evaluate management decision-making skills and, ultimately, to judge the appropriateness of a final decision. Thus the paranoid reaction may be no more than the defensive reaction of an administrator who feels uncomfortable being observed or who would rather not have his or her performance evaluated.

The paranoid reaction reflects an adversarial culture in which power over decision making is viewed as a zero-sum game. The first step in overcoming this attitude is the education of administrators and teachers alike on the benefits of cooperation and participative decision making, which can occur within the labor-management relationship. Teachers can be involved in decision making without becoming *de facto* administrators, and administrators can seek advice, suggestions, and information from teachers without giving up their decision-making power or appearing weak. The benefits of the participative process are dramatic, and increased participation can improve the quality of teaching, the quality of administrating, and, in the long run, the overall quality of schools.

To achieve the goal of creating participative cultures in schools, we must creatively learn from the experiences of private sector organizations. Since the mid-seventies, private sector organizations have experimented with everything from the suggestion box to quality circles. In education, though, these initiatives have been few and far between. We must—

1. Educate administrators and teachers about the benefits of participative decision making.
2. Examine the appropriateness of private-sector participation programs for use in schools.
3. Encourage experimentation with programs used to create participative decision-making systems.

Theme 3: Communication with Building-Level Administrators

To say that communication is the cornerstone of organizational effectiveness is probably an understatement. Through communication, organizational members share information, set goals and priorities, provide each other with advice and feedback, and evaluate their own and their organization's performance. Communication is integral to the planning process and it is vital to coordinating and controlling an organization's many activities. In fact, without communication there would be no organization at all.

In schools, an important phase of the overall communication process is the communication that takes place between teachers and their building-level administrators. School effectiveness researchers have long concentrated on the importance of principals and other building-level administrators, and there seems to be some consensus in the literature on their central role in school reform.

The effective schools literature suggests that, in effective schools, building-level administrators have frequent interaction with teachers, and frequently offer advice and feedback. The general organizational literature echoes this finding: The "open door" policies of business executives in America's "excellent" companies have been lauded as important elements in achieving organizational success.

In the previous sections of this report, we discussed the importance of resources and decision making to school reform. Implied in these discussions are assumptions about the overall importance of communication. Through communication, teachers seek resources and the organization responds. Indeed, resources like advice and feedback must be transferred through direct communication between organizational members. Likewise, increased participation in decision making must take place within the overall communications network in schools.

In the context of these earlier discussions, the communication between teachers and building-level administrators should be a central focus of reform. Resources such as information, advice and feedback must be shared by teachers and building-level administrators. Teachers must be permitted to participate in decision making. Goals and objectives must be set and shared. All of these demand a strong interface between teachers and administrators.

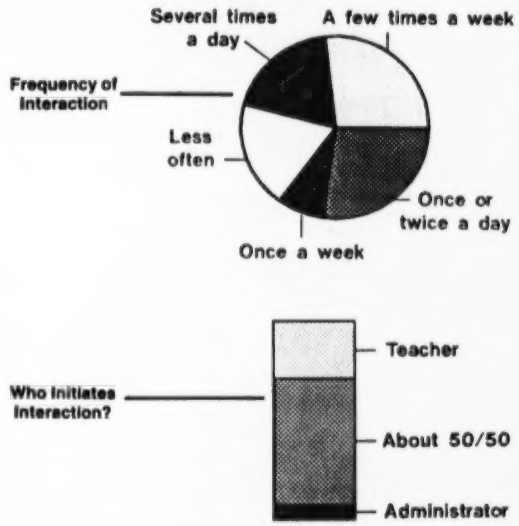
To this end, the CART survey empirically examined the interaction between teachers and their building-level supervisors. Specifically studied were the frequency of interaction, the topics of communication, and the nature of communication.

Frequency and Content of Interaction

In effective organizations, there are few barriers to communication. Interaction occurs relatively frequently. Furthermore, communication is not unidirectional; supervisors initiate discussions with subordinates and vice versa.

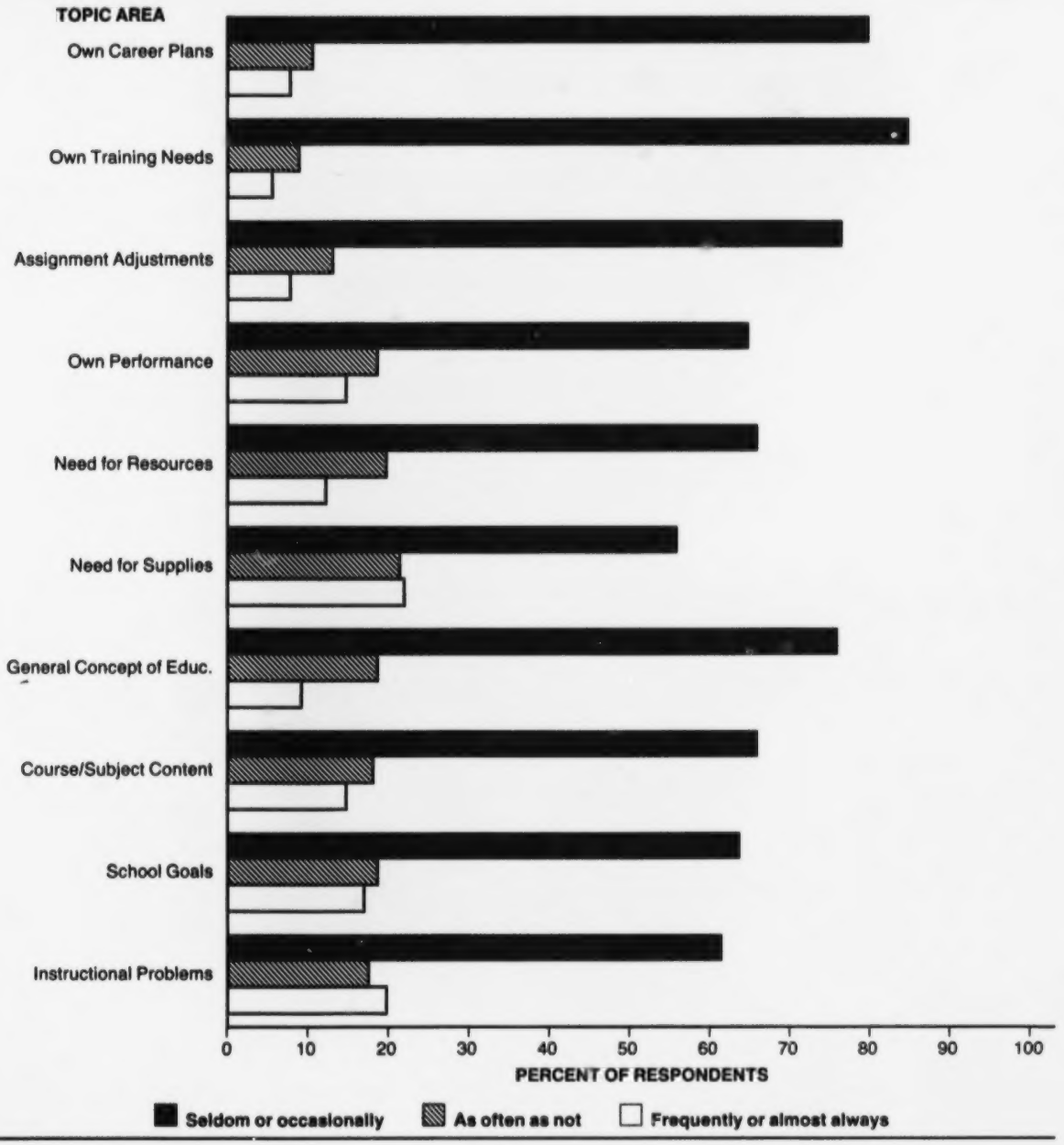
An examination of **Chart 9** shows that in schools, about a quarter of the CART survey respondents indicate that they infrequently speak to their building-level administrator. That is, about 7 percent speak to their administrator once a week, and 18 percent speak even less often. The chart also shows that administrators infrequently initiate contacts.

CHART 9.
HOW OFTEN DO TEACHERS SPEAK ON A ONE-TO-ONE BASIS WITH BUILDING-LEVEL ADMINISTRATORS?



To gain further insight into this phenomenon, teachers were asked how often they discuss several different topics with their building-level administrators. **Chart 10** displays the results. An examination of this chart shows that teachers only occasionally discuss many critical topics with administrators. For example, nearly 70 percent of the respondents only occasionally discuss their need for resources with administrators, and nearly 60 percent only occasionally talk with them about their needs for supplies. About 65 percent claim to speak infrequently to administrators about school goals. About 85 percent occasionally discuss their own training needs with their administrators, and about 65 percent occasionally discuss their performance.

CHART 10.
HOW OFTEN DO TEACHERS DISCUSS EACH OF THE FOLLOWING WITH THEIR BUILDING-LEVEL ADMINISTRATOR?



The Nature of Interaction

Another important issue on communication between teachers and building-level administrators is the style or nature of their communication. A supportive leadership style will often enhance the overall climate of schools, and professionals such as teachers typically respond to a supportive style in positive ways. Supportive leadership is willing to praise good work and show appreciation for a job well done. A supportive administrator is also eager to involve teachers by asking them for information and opinions as well as by responding to queries about their work and clarifying teaching duties and responsibilities. The net effect of a supportive leadership style is a cooperative climate and a more effective school.

In the CART survey, teachers were asked about the nature of their interaction with building-level administrators. Specifically, they were asked: When you speak on a one-on-one basis, how often does your building-level administrator talk to you in the following ways? **Chart 11** displays the results. The first two pies in **Chart 11** deal with items that demonstrate an administrator's awareness of teachers' performance and a willingness to acknowledge their work. There are mixed results on how often administrators show appreciation for work. About 42 percent of the respondents say that their building-level administrators frequently or always show appreciation, while 43 percent say that their administrators seldom or occasionally speak to them this way. A far greater percentage of teachers indicate that their administrators frequently show confidence in them (62 percent).

The next pie charts cover items that show an administrator's willingness to involve teachers in decision making by eliciting their opinions and information. Only about 35 percent of the respondents feel that their administrators frequently ask them for opinions or information, while between 42 percent and 45 percent feel that they are seldom asked for opinions or information.

The last three pie charts show how often administrators give comments that explain, clarify, or improve the job of teaching. **Chart 11** shows that about 41 percent of the respondents say that their administrators frequently explain things to them. Only 34 percent say administrators give helpful information or clarify what is expected of teachers. In fact, over half of the respondents feel that their administrators seldom clarify what is expected of them, and nearly half say they are seldom given helpful suggestions or information. This is rather disappointing; truly effective leaders must share their knowledge and information. Thus, communication is a resource teachers need to perform their jobs as best they can.

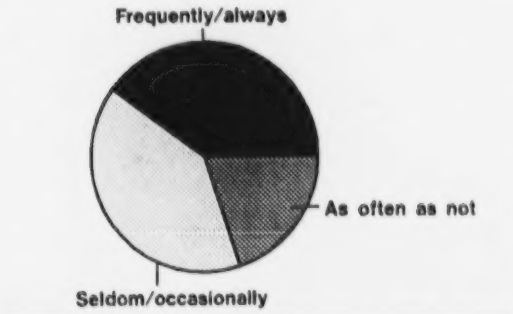
Implications for Reform

Effective leadership is important to organizational effectiveness. In organizations like schools, effective administrators must have the qualities of a supportive leader. They must be willing to speak with some frequency to teachers and generally encourage interaction. They must maintain an awareness of teachers' work and acknowledge excellence in teaching. They must seek information and advice, and otherwise involve teachers in the decisions made in schools. And effective leaders must clarify the goals, expectations and responsibilities of school staff so that work is well coordinated and that teachers never have to guess about what is expected of them or their students.

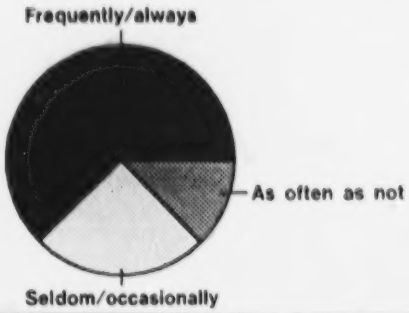
The findings indicate that, in general, there is minimal interaction between teachers and administrators in many schools, and interaction over important issues seldom occurs. Furthermore, if we generalize the results concerning the nature of interaction, far too many school administrators fail to exhibit the qualities of supportive leaders. This seems to indicate that actions must be taken to—

1. Increase the frequency of interaction between teachers and administrators.
2. Widen the scope of dialogue between teachers and administrators to include a greater variety of important school and job-related subjects.
3. Promote communications bidirectionally; i.e., encourage interaction from both teacher to administrator and administrator to teacher.
4. Train building-level administrators in supportive leadership skills and encourage the use of these skills.

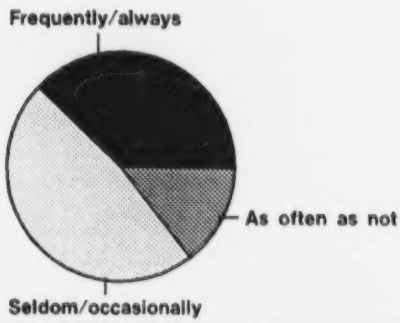
CHART 11.
HOW OFTEN DO ADMINISTRATORS SPEAK TO TEACHERS IN EACH OF THE FOLLOWING WAYS?



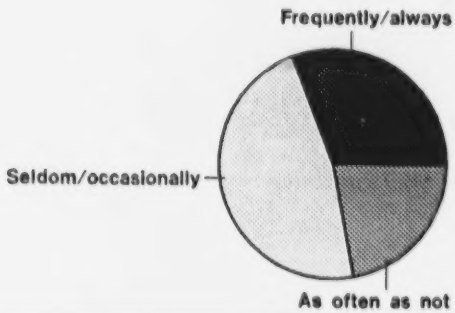
Shows Appreciation for Their Work



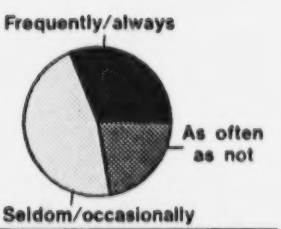
Shows Confidence in Them



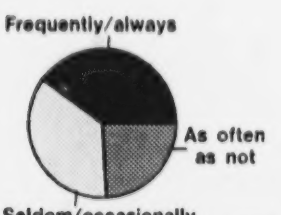
Asks for Their Suggestions or Opinions



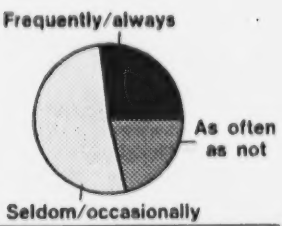
Asks Them for Information



Gives Helpful Information or Suggestions



Explains Things



Clarifies What Is Expected of Them

Theme 4: Correlates of Teacher Job Satisfaction and Career Commitment

Teacher working conditions are important because they have an impact on the quality of teaching. Indeed, the basis of this study is that the best way to achieve "reform" and to increase the overall excellence of schools is to pay close attention to the work climate and the resources provided teachers to do their jobs. In order for teachers to do the best they can, they must be permitted to work in the proper environment and they must be provided with sufficient resources to complete their job responsibilities.

To illustrate the importance of work conditions to the quality of teaching, this section of our report presents a statistical analysis that demonstrates the relationship between working conditions and teacher job satisfaction and career commitment. The underlying premise of this analysis is that satisfied, highly committed teachers ultimately perform better than dissatisfied, uncommitted teachers and, on the whole, they are more likely to stay in teaching and suffer less from phenomena like stress and burnout.

Charts 12 and **13** present the CART findings on the levels of teacher job satisfaction and career commitment. Overall, the summary job satisfaction measure has a mean of 3.10; this implies that teachers are somewhat satisfied with their jobs. But **Chart 12** shows that, on average, one-fifth to one-quarter of the respondents are dissatisfied. **Chart 13** shows that about half of the teachers responding to the survey would become teachers again if they had the opportunity to start their careers over, but over 30 percent probably or certainly would not. Another 20 percent are about evenly for or against becoming teachers again. These findings warrant concern in and of themselves, but the important question is which job-related factors most contribute to teacher job satisfaction and commitment to the teaching profession.

CHART 12.
HOW SATISFIED ARE TEACHERS WITH . . .

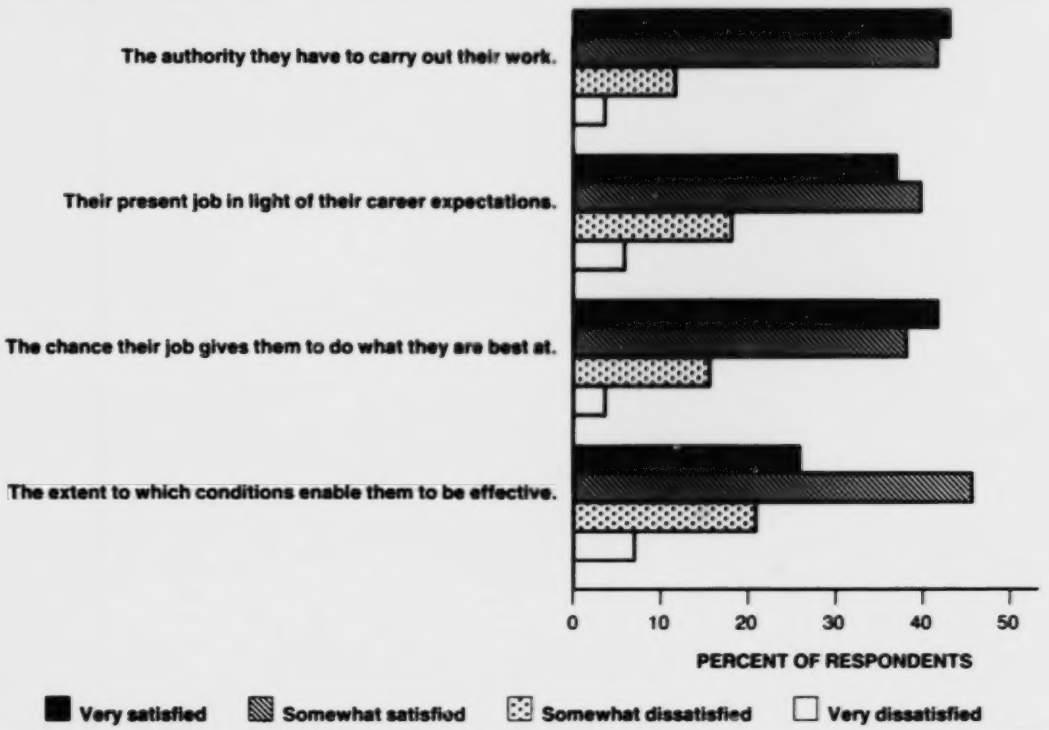
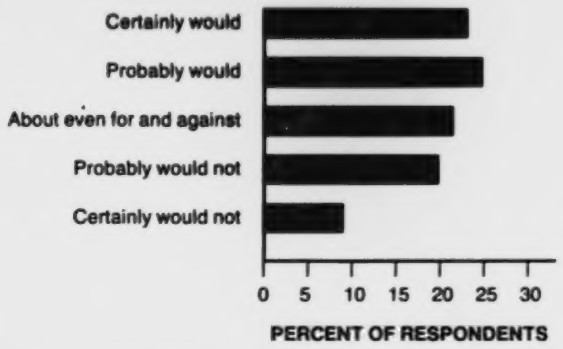


CHART 13.
IF TEACHERS COULD START OVER AGAIN, WOULD THEY BECOME TEACHERS?



To examine this question, we grouped the CART survey items into four categories of job-related factors: role conflict and ambiguity, supervisory behavior, decision deprivation, and resources. For each category, we performed a correlational analysis to tell us which work-related factors contribute to teacher satisfaction with the job of teaching and which factors contribute to teacher commitment to teaching as a career.

We found that all correlations are statistically significant. Because the test of significance is sensitive to the large sample size of the survey, for parsimony only correlations over 0.20 will be presented here. This will help us concentrate on only the strongest correlates of satisfaction and commitment.

Role Conflict and Ambiguity

Employees who occupy positions in an organization fulfill specific roles within that organization. The content of a role is determined by the objective demands made on a person and the expectations that person perceives that other people have of the role.

Many of the CART survey items directly examined how teachers perceive their roles and the expectations that exist for those roles. The findings from these items reveal both role conflict and ambiguity.

This section presents three summary measures that examine the correlation between role conflict and ambiguity and teacher job satisfaction and career commitment.

Role conflict may be thought of as the extent to which an individual feels subject to contradictory demands or expectations. There may be role conflicts over both policies and resources. A *conflict over policies* occurs whenever teachers perceive that policies are contradictory or incompatible. A *conflict over resources* occurs whenever teachers perceive that they are asked to perform jobs without the resources needed to complete them.

Role ambiguity, unlike role conflict, is not concerned with the degree to which expectations are incompatible. Rather, role ambiguity arises when teachers' roles are not well defined, or when responsibilities are not made clear.

Role conflict and ambiguity are important work-related conditions because they represent how well a job is defined. If a person's role in an organization is inherently in conflict, that person cannot perform the job properly because doing one part of the job interferes with doing another part. If a job is ambiguous, incumbents must guess about what they are supposed to do in the first place.

Results and Implications

	Job Satisfaction	Career Commitment
Conflict over expectations	0.48	−0.23
Conflict over resources	0.45	−0.24
Role ambiguity	−0.47	——

All three measures are highly correlated with job satisfaction, and both conflict measures are highly correlated with career commitment. Both conflict measures are negatively phrased, so that the higher the score, the lower the conflict. The correlations indicate that the lower the incidence of role conflict, the more satisfied and committed to teaching teachers will be. Findings also indicate that the more teachers report that their jobs are ambiguous, the less satisfied they are with their jobs.

This is consistent with our expectations and reinforces the notion that ill-defined and conflicting roles have negative consequences. The implication of these findings is that to the greatest extent possible, the content of the role of teacher should be examined and modified so that expectations are not in conflict, proper resources are provided to complete assigned tasks, and teachers know what is expected of them in their jobs.

Supervisory Behavior

Earlier in this report we discussed the importance of teacher interaction with building-level administrators. This section presents three summary measures that examine the correlation between supervisory behavior toward teachers and teacher job satisfaction and career commitment. The first measure, *positive supervisory behavior*, examines those behaviors that are indicative of a supportive administrator. Such administrators, as noted earlier, are complimentary of good performance, supportive of a participative environment, and willing to clarify expectations and explain job duties to teachers.

The second and third measures of supervisory behavior examine negative or unsupportive administrator orientations. One variable is *critical supervisory behavior*; this measures the extent to which supervisors criticize teachers and question their competence. The second variable is *unhelpful supervisory behavior*—the extent to which supervisors are generally formal and do not respond to teacher queries for guidance.

We would expect that the more supervisors act in a positive, supportive way, the more teachers will be satisfied and committed to their jobs. Alternatively, to the degree that supervisors are critical and unhelpful, the opposite is likely to occur. The importance of a building-level administrator's orientation cannot be overstated; the actions of administrators are critical to determining the overall climate of schools. A positive, cooperative climate will yield a more relaxed, dynamic, and well-coordinated teaching force, while a generally negative, competitive, or critical climate will yield isolated, defensive teachers acting independently to protect their own turf.

Results and Implications

	Job Satisfaction	Career Commitment
Positive supervisory behavior	0.36	——
Critical supervisory behavior	−0.25	——
Unhelpful supervisory behavior	−0.33	——

The results show that while the supervisory behavior measures are important as correlates of job satisfaction, they are not particularly associated with career commitment. This may indicate that while a supervisor's orientation has an impact on how teachers feel about their jobs, it does not affect how teachers feel about their decisions to become teachers. Teachers' commitment to teaching as a career is not affected by their supervisor's orientation. Instead, the correlations show that increased positive supervisory behavior enhances satisfaction, and increased critical and unhelpful supervisory behavior promotes dissatisfaction.

Decision Deprivation

To measure whether teachers feel that they have enough opportunity to participate in decision making, the CART survey included two sets of items: the first asked teachers to rate how much of an opportunity they have to participate in decision making, and the second asked them to rate how much of an opportunity they feel they *should* have in the decision-making process. The difference between how much participation teachers feel they *should* have and how much they actually do have is a measure of *decision deprivation*.

The concept of decision deprivation was introduced earlier in this report. We created a summary scale of CART survey items to examine the overall impact of decision deprivation on teacher satisfaction and career commitment. Decision deprivation is indicative of a feeling of powerlessness and noninvolvement, and we expected it to be related to both satisfaction and career commitment.

Results and Implications

	Job Satisfaction	Career Commitment
Decision deprivation	−0.42	0.23

The findings support our contention about the importance of decision deprivation. Increased deprivation is linked to both lower levels of satisfaction *and* lower degrees of career commitment. Deprivation and the tight bureaucratic culture that epitomizes organizations in which deprivation is high have real consequences for teachers and their ability to perform well. To the degree that schools can be reoriented to a participative culture, or to the degree that school administrators are willing to accept a participative decision-making structure, real gains can be made in terms of achieving excellence and allowing teachers to perform up to their capabilities.

Resources

The issue of resource allocation was discussed in some depth in Theme 1 of this report. We created two summary scales of CART survey items to measure the overall extent to which the quantity and quality of resources create job-related problems for teachers. The *resource quantity problems* scale addressed the degree to which insufficient *quantity* of resources creates problems for teachers. *Resource quality problems* address the degree to which an inadequate *quality* of resources creates problems for teachers.

To the degree that resource-related problems exist, teachers will have difficulty in performing their job responsibilities, and we expect that both satisfaction and commitment would be lower. Alternatively, if teachers are provided with the resources they need in sufficient quantity and of adequate quality, we would expect that they would generally be more satisfied and committed to teaching.

Results and Implications

	Job Satisfaction	Career Commitment
Resource quantity problem	−0.49	0.28
Resource quality problem ..	−0.49	0.23

Results support our assumptions. Both quantity- and quality-related problems are highly associated with job satisfaction and career commitment. Higher frequencies of resource problems are linked to lower job satisfaction and lower career commitment.

In short, teachers who confront resource problems and react negatively, become disenchanted and feel less committed to teaching as a career.

In Summary

The message this report conveys is clear: If we remove the obstacles that prevent teachers from doing their jobs, we will create a school organization that supports the effective completion of teacher job responsibilities. If teachers become more effective, they will be more satisfied with their work and more committed to their careers. It is not teacher *motivation* that is the issue: teachers enter their profession already motivated to do good work. The real question is: Given the current conditions in schools, are teachers able to do good work? This report has demonstrated that in many schools the answer is a resounding "no," and steps must be taken to alter the working conditions and style of leadership that currently exist in far too many school buildings.

Unless we as a nation are willing to do something about school working conditions, we will make little progress to meaningful educational reform. "Reforms" that seek to motivate teachers to perform better address the wrong issues. We must allow teachers to reach their potential by first removing the barriers to the effective performance of their jobs.

There are no quick-fixes to school reform. Following the suggestions presented in this report will not right all the wrongs in American education. But in our opinions it would be a giant step in the right direction.

We must stop neglecting our most valuable educational resource—teachers—by disregarding working conditions and job resources in our reform efforts. In many schools, working conditions foster mediocrity, not excellence, and the spirit and commitment of teaching professionals suffers. Allow teachers to do the best they can by creating a work environment that supports their efforts, and we will be that much closer to having the schools as a nation we desire and deserve.

Technical Appendix

The survey items and constructed scales used in the CART survey and not described elsewhere in this report are described in this Appendix. For each measure, descriptive statistics are presented. Additionally, the exact response frequencies for all questions graphically presented in the text of this report are presented for reference.

The Sample

The CART survey was sent to 2,530 randomly selected individuals listed in the National Education Association membership file. Exactly 1,789 completed surveys were tabulated, for a response rate of 71 percent. Approximately 47 percent of the respondents work in elementary schools; 12 percent in middle schools; 10 percent in junior high schools; and 28 percent in senior high schools. About 78 percent are regular classroom teachers, 11 percent special education teachers, and 11 percent "other."

Description of Scale Measures

Job Satisfaction and Career Commitment

Job satisfaction may be considered to be a positive or pleasurable feeling about one's job. The job satisfaction scale used in this study consists of the answers to the following survey items:

> In general, how satisfied are you with each of the following in your current teaching situation?
>
> 1. The authority you have to carry out your work.
> 2. Your present job in light of your career expectations.
> 3. The chance your job gives you to do what you are best at.
> 4. The extent to which conditions in your school enable you to be effective in your job.
>
> (1 = very dissatisfied: 4 = very satisfied)

Career commitment is operationalized through responses to a survey item that asks teachers if they would go into teaching again if they could start their careers over again.

> Suppose you could go back to your college days and start over again; in view of your present knowledge, would you become a teacher?
>
> 1 = certainly would become a teacher
> 2 = probably would become a teacher
> 3 = chances about even for and against
> 4 = probably would not become a teacher
> 5 = certainly would not become a teacher

Role Conflict and Ambiguity

People who occupy positions in an organization fulfill specific roles within that organization. The content of the role is determined by the objective demands made on the person in the role and the expectations that other people have of the role.

Three measures in the CART study deal with teachers' perceptions of their roles and the expectations that exist about that role. The first two variables deal with role conflict. Role conflict may be thought of as the extent to which an individual feels subject to contradictory demands or expectations. One role conflict measure deals with *conflict over policies* or guidelines. The three items that make up this scale follow:

> Please circle the response that most accurately describes your experience in your current teaching situation:
>
> 1. I often work under incompatible policies and guidelines.
> 2. I often have to buck a rule or policy to carry out an assignment.
> 3. I often receive incompatible requests from two or more people.
>
> (1 = very true: 5 = very false)

The second role conflict variable involves *conflict over resources* or resource allocation. This scale is made up of the following three items:

> Please circle the response that most accurately describes your experience in your current teaching situation:
>
> 1. I often receive instructions without adequate resources and materials to execute them.
> 2. I often receive extra assignments without adjustments to the ones I already have.

3. There isn't enough time during my regular workday to do everything that's expected of me.

(1 = very true: 5 = very false)

Role ambiguity is the extent to which the demands and expectations placed on an individual in his or her role are not made clear. Role ambiguity is constructed from the following survey questions:

Please circle the response that most accurately describes your experience in your current teaching situation:

1. I feel certain about how much authority I have.
2. I know what my responsibilities are.
3. I know exactly what is expected of me.

(1 = very true: 5 = very false)

A low score on the conflict measures implies that a high level of conflict exists, while high scores imply that little role conflict is experienced. In contrast, a low score on the role ambiguity scale implies that little role ambiguity exists and a high score means that a great deal of ambiguity is experienced.

Supervisory Behavior

Three measures were constructed to tap the nature of the interaction teachers have with building-level administrators. Specifically, teachers were asked:

When you speak on a one-to-one basis, how often does your building-level administrator talk to you in the following ways?

1. Shows appreciation for your work.
2. Shows confidence in you.
3. Assigns you specific tasks.
4. Explains things.
5. Gives helpful information or suggestions.
6. Asks for your suggestions or opinions.
7. Asks you for information, clarification or explanation.
8. Criticizes your ideas or plans.
9. Criticizes things you do.
10. Questions your personal competence.
11. Refuses to help when asked.
12. Is unnecessarily formal.
13. Gives excess, unnecessary information or comments.
14. Clarifies what is expected of you.

(1 = seldom or never: 5 = almost always)

The first measure is called *positive supervisory behavior*, and it consists of questions 1 through 7 and question 14. This measure examines the degree to which building-level administrators are generally supportive and encourage teacher involvement at work. A high score on this scale means that building-level administrators are perceived as very supportive.

The second measure consists of items 8, 9, and 10, and it is called *critical supervisory behavior*. The third measure, *unhelpful supervisory behavior*, is made up of items 11, 12, and 13. These two scales measure the degree to which building-level administrators are critical or nonsupportive and generally unhelpful to teachers. High scores on these scales mean that teachers feel that administrators are extremely critical or unhelpful.

Decision Making

A critical question about the decision-making structure in schools is whether teachers feel that they have enough of an opportunity to participate in decision making. To measure this, the CART study included two sets of items. The first item asked teachers to rate how much of an opportunity they have to participate in decision making, and the second asked them to rate how much of an opportunity they feel they *should* have in the decision-making process. The decision areas are—

1. The school to which you are assigned.
2. The subject(s) or grade level(s) you are assigned to teach.
3. Assignment of students to your class(es).
4. Removing students from your classroom for special instruction or assistance.
5. Designing or planning the use of facilities.
6. Budget development.
7. Expenditure priorities.
8. Staff hiring.
9. Evaluations of your performance.
10. Student discipline codes.
11. Standardized testing policies.
12. Grading policies.
13. Procedures for reporting student achievement/progress to parents.
14. Student rights.
15. What to teach.
16. How to teach.
17. The textbooks and workbooks that will be available for use.
18. The specific textbooks and workbooks that you will use in your class(es).
19. Staff development opportunities offered by your school/school district.

(1 = seldom or never: 4 = always or almost always)

By taking the difference between the "should have" measure and the "actually have" measure, a summary of *decision deprivation* is created. To standardize the measure, a constant value of four was added to each score; the scale therefore ranges from—

1	4	7
Saturated with decision-making participation opportunities	Amount of decision-making opportunities alright as is	Deprived of decision-making participation opportunities

Resources

Teachers were asked to assess how often the quantity or quality of resources created problems for them in doing their jobs. Two summary scales were created to assess the overall degree to which resource deficiencies affect teachers.

The resources teachers were queried about are—

1. Textbooks.
2. Other published instructional materials.
3. Instructional materials developed on your own.
4. Instructional materials developed with or by other teachers.
5. Audiovisual materials.
6. Audiovisual equipment.
7. General classroom supplies.
8. Money to purchase supplies or equipment for special purposes.
9. Classroom space.
10. Space for special activities.
11. Storage space.
12. Time for direct instruction of students.
13. Time for planning and preparation.
14. Time for grading and reviewing student work.
15. Time for counseling individual students.
16. Time for attending professional workshops and conferences.
17. Advice and feedback from building-level administrators.
18. Advice and feedback from other teachers.
19. Advice and feedback from staff specialists.
20. Formal evaluations of your performance.
21. Staff development opportunities provided by your school district.
22. Information provided by standardized test results.
23. Information resulting from tests developed on your own.
24. Information resulting from tests developed with or by other teachers.
25. Information contained in school and departmental files.
26. Information contained in your own resource files.
27. Assistance from student teachers.
28. Assistance from teacher aides.
29. Assistance from secretarial or clerical staff.
30. Assistance from staff or school district specialists.
31. Assistance from other teachers.
32. Assistance from custodial staff.
33. Assistance from building-level administrators.

The *problems due to quantity of resources* scale includes all 33 items; the *problems due to quality of resources* scale excludes items 3, 4, 8, and 12 through 16. Teachers were given the following response choices:

Insufficient quantity/inadequate quality has created a problem—

1	2	3	4
Not at all	Occasionally	Often	Constantly

Additionally, respondents were given a category choice that permitted them to indicate that a resource is not needed (for quantity) or that it is not available (for quality).

High scores on either of the resource scales implies that teachers experience a great number of problems because of resource inadequacies.

MEANS, STANDARD DEVIATIONS, AND RANGES OF SCALE MEASURES

Variable	Mean	St. dev.	Min., max.
Job satisfaction	3.10	0.68	1.0, 4.0
Career commitment	2.68	1.29	1.0, 5.0
Conflict over expectations	3.79	0.95	1.0, 5.0
Conflict over resources	3.00	1.05	1.0, 5.0
Role ambiguity	1.83	0.71	1.0, 5.0
Positive supervisory behavior	2.97	0.93	1.0, 5.0
Critical supervisory behavior	1.31	0.57	1.0, 5.0
Unhelpful supervisory behavior	1.50	0.71	1.0, 5.0
Decisional deprivation	5.01	0.61	3.2, 6.8
Quantity of resource problems	1.91	0.52	1.0, 4.0
Quality of resource problems	1.70	0.51	1.0, 4.0

Response Frequencies

SOURCES OF JOB-RELATED KNOWLEDGE AND SKILLS

	% Who find source "definitely effective"
Experience as a teacher	92
Consultation with other teachers	52
Observation of other teachers	50
Study/research pursued on own	46
Graduate courses in field of specialization	37
Consultation with field specialist	32
Undergraduate courses—field of specialization	31
Professional conferences/workshops	24
Professional journals	20
Graduate courses in education	19
Formal evaluation of performance	16
Consultation with administrators	15
Undergraduate courses in education	13
In-service training	13

PERCENTAGE OF RESPONDENTS EXPERIENCING PROBLEMS RESULTING FROM INSUFFICIENT QUANTITY OF RESOURCES

	Experience Problems		
Resource	Constantly	Often	Occasionally
Time for:			
Counseling	25.9	33.0	28.3
Grading	27.0	28.2	28.2
Planning	23.3	25.1	31.1
Instruction	9.7	20.1	40.1
Workshops	9.7	18.5	39.1
Space for:			
Storage	20.3	19.2	26.9
Activities	15.6	19.9	28.8
Classroom	13.0	16.5	25.7
Advice & feedback from:			
Administrators	7.3	16.9	37.8
Other teachers	3.5	11.2	39.9
Staff specialists	6.5	14.9	34.9
Assistance from:			
Administrators	5.8	11.8	39.1
Staff specialists	6.3	12.7	34.8
Clerical staff	7.5	11.0	26.7
Custodial staff	6.0	11.5	31.2
Teacher aides	12.3	10.0	14.5
Equipment, supplies & material:			
Classroom supplies	4.8	12.0	36.7
Audiovisual materials	5.2	11.2	35.3
Audiovisual equipment	5.9	10.2	33.6
Textbooks	4.2	7.4	27.6
Workbooks	6.7	8.7	22.2
Money for supplies	15.1	20.8	35.0
Knowledge, skills, & information:			
Staff development	7.3	14.3	33.2

PERCENTAGE OF RESPONDENTS EXPERIENCING PROBLEMS RESULTING FROM INADEQUATE QUALITY OF RESOURCE

Resource	Experience Problems		
	Constantly	Often	Occasionally
Space for:			
Storage	16.1	18.0	26.8
Activity	12.1	18.0	28.4
Classroom	4.5	10.9	34.5
Advice & feedback from:			
Administrators	7.0	13.2	36.4
Other teachers	2.3	5.8	34.9
Staff specialists	5.2	9.4	31.4
Assistance from:			
Administrators	6.0	10.9	37.6
Staff specialists	5.6	10.0	34.2
Clerical staff	5.0	6.9	26.2
Custodial staff	6.5	9.4	31.4
Teacher aides	6.7	6.0	15.2
Equipment, supplies & material:			
Classroom supplies	4.5	10.9	34.5
Audiovisual materials	5.7	13.3	32.8
Audiovisual equipment	6.1	12.4	32.7
Textbooks	4.0	11.2	32.5
Workbooks	4.2	9.8	24.7
Knowledge, skills, & information:			
Staff development	7.5	15.0	33.6

DECISIONAL DEPRIVATION

Should teachers have more, the same, or less of an opportunity to participate in decision making in each of the following areas?	% of Respondents		
	Should have more	Should have same	Should have less
School assignments	58.4	34.0	7.6
Grade level/subject assignments	56.7	36.5	6.8
What to teach	57.5	37.7	4.8
How to teach	45.3	49.8	4.9
Texts available for use	53.4	42.4	4.2
Texts used in own classes	51.0	45.8	3.3
Staff development opportunities	69.9	26.4	3.7
Evaluation of own performance	62.8	35.2	2.0
Designing and planning use of facilities	67.0	26.8	6.2
Staff hiring	62.8	35.2	2.0
Standardized testing policies	83.6	14.4	2.0
Student discipline codes	70.2	26.2	3.6
Grading policies	73.5	23.3	3.2
Student rights	71.9	25.1	2.9
Expenditure priorities	72.5	22.9	4.6
Budget development	70.2	25.3	4.5

FREQUENCY OF INTERACTION WITH BUILDING-LEVEL ADMINISTRATORS

How often do teachers speak on a one-to-one basis with building-level administrators?	% of Respondents	Who initiates the contact?	% of Respondents
Several times a day	19.1	Almost always the administrator	2.9
Once or twice a day	27.1	Generally the administrator	4.2
A few times a week	28.6	About 50/50	62.2
Once a week	7.4	Generally the teacher	21.8
Less often than weekly	17.8	Almost always the teacher	8.9

CONTENT OF INTERACTION WITH BUILDING-LEVEL ADMINISTRATORS

How often do teachers discuss each of the following with their building-level administrator?	Seldom or occasionally	As often as not	Frequently or almost always
Own career plans	81.4	10.9	7.7
Own training needs	85.3	8.9	5.9
Assignment adjustments	77.9	13.7	8.3
General concept of education	77.6	13.5	8.9
Course/subject content	66.5	18.4	15.1
School goals	64.5	19.0	16.5
Instructional problems	62.5	17.4	20.1
Own performance	65.3	19.7	15.0
Need for resources	66.6	20.5	12.9
Need for supplies	56.9	21.2	21.8

NATURE OF INTERACTION WITH BUILDING-LEVEL ADMINISTRATORS

When teachers and administrators speak, how often do administrators speak to teachers in the following ways?	Frequently/ always	As often as not	Seldom/ occasionally
Shows appreciation for their work	41.7	15.1	43.2
Shows confidence in them	62.4	13.8	23.8
Asks for their suggestions or opinions	36.4	18.5	45.1
Explains things	40.8	22.3	36.9
Gives helpful information or suggestions	33.7	19.6	46.7
Clarifies what is expected of them	29.4	19.3	51.3

CAREER COMMITMENT

If you could start over again, would you become a teacher?	% of Respondents
Certainly would	23.1
Probably would	25.8
About even for and against	21.1
Probably would not	20.3
Certainly would not	9.6

Understanding the Learning Workplace: The NEA Conditions and Resources of Teaching Survey and the Research on Effective Teaching

Susan J. Rosenholtz

August 1986

Introduction

The next decade will be a time of enormous volatility in the teaching occupation. A majority of our teaching work force in 1992 will consist of people who are not presently employed. The National Center for Education Statistics (NCES) estimates that, by that year, the country will need to fill 1,553,000 teaching positions, and the nation's teacher preparation programs will produce only 1,270,000 graduates within that same timeframe (Plisko & Stern 1984). This means that there will be a severe shortage of teachers within the next few years. Indeed, shortages of qualified teachers are already being felt in various localities ranging from Los Angeles to New York, in critical subject matter areas including math, science, and bilingual education (Plisko & Stern 1984; Darling-Hammond 1984).

A confluence of two demographic patterns has produced this fundamental problem for the nation's education system. First is the relative "graying" of the current teaching population. The average age of the present work force—an estimated 41 years (Schlechty & Vance 1983)—means that a substantial proportion of the present teacher work force will face retirement within the next decade. Second, as a result of the baby boom of the 1980s, the population of entering school-age children has already begun to cause enrollment increases in the earliest elementary grades (Sweet & Jacobsen 1983).

Of greater relevance, there are also several demographic patterns within the teaching corps itself that contribute to the projected shortage of teachers. Specifically, graduation from teacher preparation programs has declined by as much as 50 percent over the last decade (Feistritzer 1983). Further, as many as 30 percent of those who prepare to become teachers do not enter the labor market (Vance & Schlechty 1982; Sweet & Jacobsen 1983). And among those who enter, attrition from teaching in the earliest career stages is staggeringly high. It has been estimated that over 30 percent of new teachers do not make it to their second year of teaching (Mark & Anderson 1985), and by the end of their fifth or sixth year, another 20 to 30 percent of the same cohort has defected (Charters 1970; Mark & Anderson 1985; Schlechty & Vance 1983).

These demographic shifts and turnover problems carry profound and negative implications for the quality of the work force. Among the most distressing is that early defectors from teaching are the most academically talented individuals (Lyson & Falk 1984; Pavalko 1970; Schlechty & Vance 1983), who, at least as revealed by tests of verbal ability, are the very people most likely to succeed in helping students learn (Ekstrom 1975; Gibson & Dembo 1984; Levin 1970; Murnane & Phillips 1981). Further, there is evidence that those teacher preparation students who choose not to enter the teaching force each year are among the most academically able (Vance & Schlechty 1982). Finally, teaching effectiveness among those who choose to stay in teaching, as revealed by students' standardized achievement test results, begins to decline after three to five years, and even more substantial declines are evident after ten years (Katzman 1971; Levin 1970; McLaughlin & Marsh 1978; Murnane 1975). In fact, at the school level, researchers have documented that as teachers' collective years of experience increase, the school's student learning gains decline (Eberts, Kehoe, & Stone 1984; Rosenholtz in press; Schneider 1985).

The problem of teacher attrition, particularly among those who stand the greatest chance of academic success with students, when combined with the predicted teacher shortage in the next several years, portend, an ominous sense of doom for the excellence of the nation's schools. Taken together, the findings signal an urgent need to find answers to pressing policy questions: How can persons of ordinary ability be furnished with training, experiences, occupational conditions, and rewards that will make them more effective teachers? How can effective teachers be retained in the classroom? How can overstayed teachers—veterans who have ceased making significant contributions to the learning efforts of students—become professionally renewed? These are but a few of the fundamentally important questions to which policy makers need answers if the tumultuous period ahead is not to end in calamitous results for the quality of the nation's schools.

This paper addresses some of these questions, particularly as they relate to data gathered from the National Education Association's study on the *Conditions and Resources of Teaching* (CART). This survey, collected from a national, random sample of 1,789 teachers, intends to capture some of the complexity surrounding teachers' working lives (see Bacharach, Bauer, & Shedd 1986 for a description of the sample). The first

section that follows provides a conceptual framework for understanding teachers' motivation to become productive school contributors. The next section examines the knowledge about school practices that bear directly on teachers' workplace commitment, retention, and quality, and, within this latter context, data collected through the CART survey is analyzed. The final section identifies policy implications from the findings that have the greatest salience for teacher quality and commitment to teaching.

The Definition of Workplace Commitment

The basic conditions that promote high-performance motivation and commitment to work have been described by some organizational social psychologists as *internal motivation*. Where people are highly motivated, their feelings are closely tied to how well they perform on the job; good performance is self-rewarding and provides the incentive for continuing to perform well. Alternatively, poor performance is an occasion for distress that causes internally motivated people to search for ways to avoid such feelings in the future and to regain those pleasurable feelings that accompany good performance (Hackman & Oldham 1980, Chap. 4). But when workers experience low internal motivation, they engage in a variety of work behaviors that produce self-fulfilling prophecies in the acquisition of self-rewards, and ultimately, in the quality of their performance. This constellation of negative behaviors include absenteeism from work, alienation, generalized feelings of dissatisfaction, low-effort expenditure, and outright defection.

If internal motivation is the condition necessary for workers' commitment, it follows that teachers' commitment can alternatively be viewed as *the extent of their satisfaction, attendance, and retention*, a definition pursued in the present paper. There are both theoretical and empirical grounds for the clustering of these variables. Theoretically, dissatisfaction with the conditions of work may manifest itself most dramatically in a decision to defect from the work force (Locke 1975; March 1958). The link between dissatisfaction and actual defection, however, may be affected by the alternatives individuals perceive to be available. A lack of alternative types of employment or declining enrollment, which limit opportunities for teachers to transfer to more favorably perceived schools, for example, may cause dissatisfied teachers to stay where they are, withhold service, and "settle for less." As the ultimate manifestation of withheld service, people may resort to chronic absenteeism, a serious problem prevalent in many low-socioeconomic urban schools (Bruno & Doscher 1981; Sizemore 1985).

Empirically, a growing body of evidence from industrial social psychology reveals that the same elements predicting turnover can be used successfully to predict absenteeism (Marcus & Smith 1985; Johns & Nicholson 1982). For the teacher work force as well, dissatisfaction, absenteeism, and attrition are highly correlated (Bredeson et al. 1983; Litt & Turk 1983; Rosenholtz in press). For instance, *The Metropolitan Life Survey of Former Teachers in America* (MLS 1986), in interviewing some 500 former teachers across the country, found that two of the strongest predictors of teacher attrition were workplace dissatisfaction and stress. Coupled with these latter findings is a health survey of some 9,000 teachers conducted by Landsmann (1978), in which 75 percent of the respondents reported that some to most of their absences the previous year were the result of teaching-related stressors.

Organizational Conditions of Workplace Commitment

Work motivation and commitment have less to do with the personal qualities people bring with them to the workplace than with how jobs are designed and managed within it. Hackman and Oldham's (1980) analysis of the way people's attitudes and behavior are shaped by different organizational settings is useful in identifying three conditions of work under which high commitment usually results.

Knowledge of Positive Results

First, for work to be motivating, people must have knowledge of the results of their efforts. Without knowledge about how one performs, there is little reason for self-congratulatory sentiments. Knowledge of work performance is directly related to the amount of feedback one receives from doing work. Feedback can be obtained directly from the work itself, as when a dishwasher repairperson turns on the machine and discovers that it is, in fact, fixed, or from external recognition and approval that may be offered by others in the organizational setting, as when a supervisor commends a subordinate for a job well done.

In a parallel manner, most teachers derive their strongest rewards from positive and successful relations with students (Bishop 1977; Lortie 1975; McLaughlin et al. 1985). Of particular relevance to the CART survey, teachers also accrue psychic rewards from the external recognition they receive from valued coworkers, including colleagues, parents, and principals (Chapman & Lowther 1982; Guskey 1984). It is not unexpected therefore, that the absence of recognition and rewards figures largely into teachers' disaffection, absenteeism, and desire to leave the work force (Bredeson et al. 1983; Kasten 1984; Litt & Turk 1983; MLS 1986; Raschke et al. 1985).

The CART survey allows exploration of the relationship between teachers' reported positive or negative feedback from administrators, and their commitment to the profession. Teachers were asked to describe the content of their individual interactions with building administrators, given a series of topics and possible responses. For this analysis we have combined response categories of "seldom" with "occasionally," and "as often as not" and "frequently" with "always or almost always."

Teachers were also asked, "If you could start over again, would you become a teacher? Responses of "probably would become a teacher again" were combined with "definitely would become a teacher again," and "probably would not become a teacher again" were combined with "definitely would not become a teacher again." Given previous research, if teachers receive positive recognition from administrators, then we should find them more likely to again choose teaching as a career. Conversely, negative feedback from administrators should result in teachers less willing to renew their professional commitment. The analysis for four topic areas is presented in **Table 1**.

Comparing columns for each question, we first see that teachers whose principals showed appreciation for their work sporadically to not at all were significantly less likely to renew their commitment to teaching than were teachers who reported frequent administrative acknowledgment for their efforts (55% vs. 71%). Second, principals who reportedly expressed confidence in teachers' abilities engendered more renewed commitment than those who did not (53% vs. 67%). Most devastating from the standpoint of reaffirmed commitment, however, are the latter two results in **Table 1.** Here the large majority of teachers who reported experiencing regular criticism for their ideas and plans, would not choose teaching again as a career, while the opposite holds true for those whose principals refrained from demeaning or insulting remarks (41% vs. 63%). Nearly identical results were obtained for teachers who reported regularly encountering criticism for the things they do (40% vs. 63%).

With respect to teachers' performance, there is something of a self-fulfilling prophecy in these findings. It is precisely that challenges to teachers' professionalism and competence by administrators unwittingly channel them away from instructional success with students. The more administrators criticize or demean teachers, the lower teachers' feelings of professional confidence, and the less likely they are to muster the undaunted effort necessary to help students learn (Ashton & Webb 1986; Rosenholtz in press). Then too, if mostly negative and critical remarks come teachers' way, and their efforts go largely unappreciated, why should they bother trying? Teacher dignity is especially vulnerable where their professional skills are called into question, a situation that leads them to avoid contact with, or, worse still, show strident hostility toward those who—at least theoretically—are in the best position to help them enjoy greater academic success with students (Rosenholtz 1987).

TABLE 1.
TEACHERS' DISCUSSIONS WITH BUILDING ADMINISTRATORS BY THEIR LEVEL OF COMMITMENT

How often does your building administrator:	Would become a teacher again	Would not become a teacher again	Total
A. Show appreciation for your work?			
As often as not; occasionally; seldom or never	55%	45%	100%
Frequently; almost always	71%	29%	100%
		$X^2 = 123.0, p < .001$	
B. Show confidence in you?			
As often as not; occasionally; seldom or never	53%	47%	100%
Frequently; almost always	67%	33%	100%
		$X^2 = 233.0, p < .001$	
C. Criticize your ideas or plans?			
As often as not; occasionally; seldom or never	63%	37%	100%
Frequently; almost always	41%	59%	100%
		$X^2 = 1389.4, p < .001$	
D. Criticize the things you do?			
As often as not; occasionally; seldom or never	63%	37%	100%
Frequently; almost always	40%	60%	100%
		$X^2 = 1384.9, p < .001$	

At the same time, most principals who perceive teachers as unsuccessful or less than capable do not commit the necessary time, effort, and resources to enable them to improve (Rosenholtz 1985a; in press). As a result, continued underachievement by teachers simply reinforces administrators' beliefs that teachers are, in fact, meeting some degree of failure and are beyond their capacity to either assist or change (Rosenholtz in press). That individual schools can generate their own teaching quality and commitment problems through negative faculty-administrative interaction, then, is a vital point to emphasize.

Increased Task Autonomy and Discretion

To enhance workplace commitment, people must also experience personal responsibility for the outcomes of work, believing that their results are attributable directly to their own actions. If the outcomes of work can be better explained by external factors (such as having a "good" or a "bad" group of students) than by people's own contributions, again there is little reason for work-related self-esteem, even when particularly positive outcomes are achieved. This organizational condition involves the extent to which work provides substantial freedom, independence, and individual discretion in carrying out tasks (Hackman & Oldham 1980; Kanter 1977). Jobs that give people more autonomy and discretion require that they exercise judgment and choice; in doing so, they become the primary factor in their own performance. Losing the capacity to control the terms of work, determining what work is to be done, how the work is to be done, or what its aim is to be, on the other hand, widens the gap between the knowledge of one's unique contributions to one's job and any work-related self-esteem that can be derived. The results of work no longer become reflections of individuals' efforts, and people become estranged and alienated from them, no longer willing to accept personal responsibility for, or ownership of, their task outcomes (Gecas & Schwalbe 1983).

For the teacher work force as well, there is substantial evidence that professional independence and discretion bolster their professional motivation, responsibility, and commitment, and that a lack of independence and discretion is frequently cited as a reason for dissatisfaction, absenteeism, and attrition (Azumi & Madhere

1983; Chapman & Hutcheson 1982; Hoy, Tarter, & Forsyth 1978; MLS 1986; Rosenholtz in press). For instance, deCharms and Muir (1978), in one of the most comprehensive studies of motivational change, attempted to reverse teachers' conspicuous disinterest in classroom learning in one inner-city school. To accomplish this, the researchers initiated an extensive program in which teachers became self-reflective about their situations and resources. Aided by several significant administrative changes, teachers came to perceive that they had options, choices, and opportunities. And as teachers developed the sense that they could indeed control their own fate, their work commitment and academic success with students increased dramatically.

To emphasize the point that aspects of teachers' commitment and their professional autonomy and discretion are not immutable realities in all schools, we again turn to the CART data collected by the NEA. Teachers responded to a series of questions about the extent to which they participated in five classroom-related decisions. These data, presented in **Table 2**, were also analyzed by teachers' willingness to renew their commitment to teaching.

Comparing columns for each question, we find first that the extent to which teachers' reported using teaching materials of their own choice shows marked and highly significant effects on their commitment to teaching. Less than half of those who exercised little control over the selection of teaching materials reaffirmed their career choice, while over two-thirds of those who frequently selected their own materials again committed themselves to teaching.

TABLE 2.
TEACHERS' PARTICIPATION IN WORK-RELATED DECISIONS BY THEIR LEVEL OF COMMITMENT

How often do you participate in decision making regarding:	Would become a teacher again	Would not become a teacher again	Total
A. The specific textbooks and workbook that you will use in your class?			
Occasionally; seldom or never	48%	52%	100%
Often; almost always	65%	35%	100%
		$X^2 = 414.3, p < .001$	
B. How to teach?			
Occasionally; seldom or never	50%	50%	100%
Often; almost always	66%	34%	100%
		$X^2 = 500.3, p < .001$	
C. What to teach?			
Occasionally; seldom or never	55%	45%	100%
Often; almost always	66%	33%	99%*
		$X^2 = 185.1, p < .001$	
D. Grading policies?			
Occasionally; seldom or never	57%	43%	100%
Often; almost always	69%	31%	100%
		$X^2 = 136.9, p < .001$	
E. Removing students from your classroom for special instruction or assistance?			
Occasionally; seldom or never	53%	47%	100%
Often; almost always	70%	29%	99%
		$X^2 = 113.8, p < .001$	

*Percentage sums do not always equal 100% because of rounding.

The degree to which teachers were told *how* and *what* to teach also significantly affected their commitment. Two-thirds of those who freely deliberated, made judgments and selections about the teaching techniques, methods, and content appropriate for their students, renewed their teaching commitment. But only half of those whose choice of teaching methods and strategies were curtailed, and only slightly over half of those whose curricular content was mandated did likewise.

Similar findings appear for teachers' reported discretion to determine student grading policies. Almost 70 percent of the teachers who were granted autonomy in the area reaffirmed their career decision, while only 57 percent of those denied this policy decision again chose to become teachers.

Finally, the extent to which teachers were given professional discretion to decide when students in their classroom required special instruction or assistance also powerfully affects their commitment. More than two-thirds of those given such discretion again reaffirmed their commitment to teaching, while only 57 percent of those denied this fundamental decision did so.

It is well worth noting at this point that the problem of low professional empowerment is not simply one of lack of commitment to teaching. There are more fundamental ways that discretion and control over classroom decisions directly influence teachers' success with students and their ability to accrue psychic rewards. Stated simply, teacher involvement in decision making encourages the deliberative evaluation and modification of curriculum and instruction required to enhance the quality of classroom learning. For one thing, such decision-making activities increase teachers' clarity about instructional purpose and lead ultimately to better teaching performance, as decisions become conscious and well-reasoned choices rather than arbitrary or automatic reactions (e.g., Cruickshank 1985; Little 1984; Rosenholtz in press). For another, teachers' autonomy and discretion over matters related to curriculum and instruction allows them to accommodate the varied learning needs of individual students within their classes (e.g., Barr 1975; Darling-Hammond & Wise 1985). To inhibit the adaptation of curricular content or instructional strategies to improve the fit between what teachers do, on the one hand, and students' academic needs, on the other, is to unwittingly program both students and teachers for greater academic failure (Rosenholtz 1985a). For their part, teachers' lack of success with students leads to less confidence in their ability to teach and less occasion for self-congratulatory sentiments. It is not surprising, therefore, that the absence of involvement in classroom-related decision making by teachers is frequently implicated in the failure of schools to succeed academically with students (Armor et al. 1976; Rutter et al. 1979; Sizemore 1985; Venezky & Winfield 1979).

Experienced Meaningfulness of the Work

If job commitment is to be enhanced, people must experience work as meaningful, something that is important to their personal values and beliefs. If work is perceived as trivial or unimportant, no matter how much feedback about good job performance and internal control the person accrues, there is little cause for self-fulfillment.

Work can elicit feelings of personal meaningfulness for those who perform it in a variety of ways. The most important way is through *professional growth and development*—skills that are utilized through a variety of different and increasingly challenging work-related activities. Once jobs have been mastered, they become routine, tedious, and monotonous unless there is further challenge that stretches people's talents and abilities. Work opportunities that allow people to grow and develop, to perfect current skills and to learn new ones, give them a sense of challenge, personal progress, and meaningfulness (Hackman & Oldham 1980).

Kanter's (1977) distinction between the "stuck" and the "moving" in her study of corporate life is relevant here. The stuck feel no sense of progress, growth, or development and so tend to lower their aspirations and appear less motivated to achieve. They tend to shy away from risks in the workplace and proceed in cautious, conservative ways. The moving, by contrast, tend to recognize and use more of their skills and aim for still higher aspirations. Their sense of progress and future gain encourages them to look forward, take risks, and grow. The point is brought home quite sharply in an experimental study by McClelland (1985). Here "achievement training," where individuals were given opportunities for independent and successful action at challenging new tasks, increased not only their motivation to excel but also their willingness to attempt new activities.

Consistent with these findings, teachers sometimes complain of monotony and professional stagnation where they have continued to use the same instructional techniques and practices year after year, quite often to the point where they become bored, unenthusiastic, and unable to motivate students (Blase 1986; Bredeson

et al. 1983; Kasten 1984; Rosenholtz in press). That more experienced teachers may cease to introduce innovative curricular materials, techniques, and strategies is one likely reason that student learning gains decline after five or more years of teaching. It is not surprising therefore, that the opportunity to confront new challenges, to test and expand teaching repertoires, has been found to be the primary reason teachers involve themselves in instructionally innovative programs (Mann 1985; Huberman & Miles 1984). Indeed, people confront new work challenges not just because they are interesting and exciting, but because their goal is to learn, to become more skilled and knowledgeable. This explains more fully why the absence of opportunities for professional growth is frequently cited by teachers as reasons for their disaffection, absenteeism, and attrition from work (Blase 1986; Bredeson et al. 1983; Kasten 1984; Mann 1985; MLS 1986; Rosenholtz in press).

For organizations to remain productive and viable, they must adapt to ever-changing needs, find solutions to contemporary problems, new situations and uncertainties, and develop and implement new knowledge, skills, and ideas (Campbell 1977; Dalin 1978). In other words, productive organizations must have the capacity for self-renewal. Organizational renewal results in large measure from contextual variables—those structures and processes set in place for purposive experimentation and continuous growth.

Heckman (1982, p. 56) defined a renewing school as one that "attempts to solve (and often succeeds in solving) its own problems and has a continuous process of improvement based upon staff-designed alternatives that meet the needs of those in the school." From the larger data set of *A Study of Schooling in the United States*, Heckman selected a subsample of 18 schools—nine more- and nine less-renewing elementary, junior high, and high schools—contrasted by their organizational conditions but comparable on other school features such as size, the student population served, and per-pupil expenditures. Schools were distinguished by their degree of renewal in two ways: First, teachers responded to an interview question, "What is the most important change that has occurred at this school in the last three years?" In more-renewing schools, teachers identified specific problems that were amenable to change and expressed positive sentiments toward the changes made in response to the problem. In less-renewing schools, teachers identified diffuse, global problems and expressed the sentiment that problems seemed intractable. Second, teacher survey responses averaged to the school level differentiated more for less-renewing schools. Questionnaire items included the frequency of (1) staff evaluation of its programs; (2) examining alternative solutions to problems before attempting them; (3) teachers' seeking out new ideas and ways of teaching; and (4) teachers' willingness to experiment.

In examining teachers' personal qualities (e.g., age, gender, teaching experience, educational attainment), Heckman found overall that the school was the most critical unit for renewal rather than the background characteristics of individual teachers. The only exception was the extent of teaching experience: The higher the average years of teaching experience, the less renewing the school. Organizational differences between more- and less-renewing schools clustered into several categories: (1) strong principal leadership with an academic emphasis and high expectations for success; (2) teachers' emphasis on collegial problem solving; and (3) high faculty commitment.

Rosenholtz (in press) conceptualized the school's capacity for self-renewal as *teachers' learning opportunities*, using comparable items. This measure was the strongest organizational predictor of student gains in reading and math measured at the school level over a three-year period, and at least as strong as students' prior knowledge, the socioeconomic status of youngsters served by the school, the school's average student attrition rate over the three years, teacher absenteeism, and years of teaching experience. Further, the extent of teachers' learning opportunities within the school was a powerful determinant of teachers' commitment—their satisfaction, retention, and attendance. Because this organizational feature underlies many of the important dimensions of teacher quality and commitment, considerable space is devoted here to examining two critical school conditions that provide these opportunities.

Goal Clarity. One activity that distinguishes principals from more than less academically effective schools is the setting of specific goals for student achievement in concert with their faculty. Goal adoption by faculty in these settings is often facilitated by principal action that ensures frequent opportunities for contact among teachers about the school's instructional priorities (Armor et al. 1976; Glenn & McLean 1981; Phi Delta Kappa 1980). At some schools, time is set aside by principals for meetings among faculty to discuss instructional goals, possibilities, and impediments (Sizemore 1985; Glenn & McLean 1981). At other schools, principals build substantive interaction opportunities into in-service programs (Armor et al. 1976; Hunter 1979; Phi Delta Kappa 1980) or formally establish subgroups of faculty who are charged with solving particular technical problems (Sizemore 1985; Wynne 1980).

Goal-setting activities are critical to teachers' learning opportunities for three reasons. First, they communicate directly the principal's expectations that teachers are, in fact, capable of making progress as manifest by student learning. Second, school goals provide a basis for rational decision making and action—a way for teachers to decide how to organize, execute, and evaluate their instructional decisions. Without common goals, teachers have little basis for deciding what to emphasize in their teaching or for evaluating their teaching success. Improvements in their performance then become unlikely or random without a clearly perceived need. But in stressing, for example, the importance of students' basic skill learning as a schoolwide goal, teachers have clearer direction for choosing curricular content and method, and for evaluating and modifying their choices to make instructional improvements. Third, without common goals, there can be little common effort expenditure on the part of teachers, and little basis for professional dialogue. It is altogether likely, therefore, that teachers will point efforts toward improvement—if they make them—in entirely different directions.

Teacher Evaluation. Teacher growth and development depend to no small extent on a recognized need for new skills. The absence of clear guidelines about what teachers are to emphasize, however, leaves many uncertain about precisely how well they are doing (e.g., Ashton & Webb 1986; Glidewell et al. 1983; Lortie 1975), and offers few means by which either to identify improvement needs or to redirect their energies toward betterment.

Ambiguity about performance springs also at least as much from principals' lack of clarity about how teachers' performance is to be monitored and evaluated. Most principals, unsure that their actions will produce many desirable effects, not surprisingly muster little effort to resolve this ambiguity for teachers (Levy 1970; Morris et al. 1981; Natriello 1984; Natriello & Dornbusch 1980), either in the frequency, clarity, or usefulness of their evaluation efforts.

Affirming this point is an NEA survey reported by Dreeben (1970), in which fewer than 50 percent of the randomly sampled principals reported sufficient time for the accurate assessment of teachers. In fact, 33 percent of the tenured teachers, and 19 percent of the probationary teachers reported *no* classroom observation at all (Dreeben 1970; Natriello 1984). An even gloomier picture of teacher evaluation is painted by Natriello and Dornbusch (1980). Teachers in their sample reported receiving formal evaluations from their supervisors only once in every three years, and were mostly unclear about the criteria used to evaluate their performance. Lamented one teacher, "If I were to drop dead, the only way they could find out would be the smell after a few days."

Wise et al. (1985), surveying teachers from 32 school districts that had been identified reputationally for their highly developed evaluation practices, discovered that, even in those settings, teachers called for a more rigorous form of evaluation instead of one that relied primarily on subjective, inconsistent, and ineffective feedback from principals. Teachers reported that such evaluation practices provided insufficient feedback about criteria against which they were judged, and therefore led to little meaningful assistance. Further, even among "exemplary" districts, the frequency of evaluation varied widely: Nontenured teachers were evaluated from between once a year to twice a month; tenured teachers were evaluated from between once a year to only once in every four years.

In stark contrast to schools where uncertainty on the part of teachers arises from infrequent, unclear supervision (if, indeed, any supervision at all), principals of academically successful schools, guided both by the assurance that teachers can learn and by explicit learning goals, regularly monitor classroom affairs and student learning (Armor et al. 1976; Brookover et al. 1979; Glenn & McLean 1981; Sizemore 1985; Venezky & Winfield 1979). In response to limited student progress, additional assistance in terms of support help is often dispatched to needy teachers (Armor et al. 1976; Rosenholtz in press; Rutter et al. 1979; Sizemore 1985; Venezky & Winfield 1979). Assuming that greater student learning gains in these schools serve as evidence of teacher learning, we find strong support for the proposition that clear, frequent, and useful feedback to teachers enhances their teaching repertoires.

Additional support for the notion that regular and objective observations of teachers result in teachers' professional development and student learning comes from two other studies. In a three-year study of the implementation of the Distar reading program in seven low SES elementary schools, Gerstein et al. (1986) found that intensive monitoring, feedback, and assistance to needy teachers in their day-to-day classroom problems resulted in greater teacher learning and, ultimately, substantially higher student learning gains in reading.

Wise et al. (1985), in detailed case studies, discovered that the four most effective evaluation systems placed primary emphasis on improving both individual and collective teaching practices within the school. Teach-

ers and administrators collaborated about evaluation goals, processes, and outcomes. Consequently, each system sharpened teachers' awareness of the process of instruction in their own classroom practices, accelerated remedial help by principals and other staff, and permitted situation-specific rather than standardized assistance to be rendered. As a result, evaluation practices aimed at staff development in one district brought about a 20-percentile gain in student achievement test results over a four-year period. In a second district, the evaluation process was embedded within teachers' own improvement goals. In this way, Wise et al. (1985) note, teachers were evaluated against their own yardstick, appropriate to their particular teaching challenges and learning needs.

The CART data collected by the NEA offer more than just a glimpse into the extent to which goal setting and performance feedback occur in schools. Drawing again from questions about the extent to which building administrators interact with teachers, several items, presented in **Table 2,** are highly relevant.

Again combining response categories of "seldom" with "occasionally" and "as often as not," and "frequently" with "almost always," **Table 3** reveals first that, with respect to goal clarity, only a small proportion of teachers reported routine discussions with their building administrators about school goals, objectives, and priorities (16.5%), general concepts of education (8.9%), subject matter and course content (15.1%), and student learning (33.9%). **Table 1** also shows parallel findings with regard to administrators' performance feedback to teachers. Only a minority of those sampled reported that their building administrators regularly provided helpful information and suggestions (33.7%), discussed teachers' personal training needs (5.9%), instructional problems, and techniques (20.1%), and teachers' own performance (15%).

Of equal importance in the CART data, the majority of teachers sampled were uninvolved in making decisions about either their own staff development needs or evaluations of their performance. Over 55 percent reported infrequent participation in evaluations of their performance, while 60 percent reported infrequent participation in decision making about staff development. The significance of these latter findings can be better understood with the knowledge that teacher involvement in both staff development activities and their participation in determining standards for evaluating their performance substantially heighten the probability of teachers learning new instructional strategies and techniques (Rosenholtz, 1985b; Little 1982; Wise et al. 1985). Consistent with previous research, then, all of this says that in most schools, teachers are left on their own to devise teaching objectives, strategies, and techniques, their own improvement needs, a manner in which to obtain them, and ways to measure their success. It is also altogether likely, given the preponderance of evidence available (see Rosenholtz 1985a), that colleagues working under these organizational arrangements find little basis—and precious few opportunities—to engage in substantive dialogue with each other about instructional goals, problems, and possible solutions.

Given the absence of learning opportunities perceived by most teachers, we would anticipate that their commitment to teaching will also wane correspondingly. This proposition was tested by again cross-tabulating responses to each item described above by teachers' commitment to again choose teaching as a career. These results appear in **Table 3**.

As predicted for each item related to goal clarity, significantly more teachers would renew their commitment to teaching if asked to decide over again where regular discussion with administrators occurred about: (1) school goals (70% vs. 60%); (2) general concepts of education (72% vs. 61%); (3) subject matter and course content (69% vs. 60%), and (4) student learning (67% vs. 59%).

An identical message is delivered in items related to performance feedback and assistance: Where teachers received regular performance information and substantive guidance aimed at instructional improvement, they were significantly more likely to reaffirm their professional commitment than those who did not. These findings were sustained where administrators: (1) provided helpful information and suggestions (73% vs. 56%); (2) discussed teachers' personal training needs (78% vs. 61%); (3) dealt with instructional problems and techniques (69% vs. 60%), and talked with teachers' individually about their own performance (70% vs. 60%). Finally, significantly stronger professional commitment resulted where teachers themselves participated in determining their own in-service needs (70% vs. 56%), and were meaningfully involved with administrators in evaluating their own performance (68% vs. 57%).

At the risk of appearing redundant, together these findings underscore with particular emphasis that teachers' increased instructional success with students arising from clear goals, helpful performance feedback, and participation in determining in-service needs and evaluative criteria leads, in the end, to both greater psychic rewards and higher professional commitment.

TABLE 3.
COMPONENTS OF TEACHERS' LEARNING OPPORTUNITIES BY THEIR COMMITMENT TO TEACHING

Part 1. GOAL CLARITY

How often do teachers discuss each of the following with their building administrator:	Would become a teacher again	Would not become a teacher again	Total
A. School goals, objectives, and priorities?			
As often as not; occasionally; seldom or never	60%	40%	100%
Frequently; almost always	70%	30%	100%
		$X^2 = 711.1, p < .001$	
B. General concepts of education?			
As often as not; occasionally; seldom or never	61%	39%	100%
Frequently; almost always	72%	28%	100%
		$X^2 = 1010.8, p < .001$	
C. Subject matter and course content?			
As often as not; occasionally; seldom or never	60%	40%	100%
Frequently; almost always	69%	31%	100%
		$X^2 = 773.6, p < .001$	
D. Student learning?			
As often as not; occasionally; seldom or never	59%	41%	100%
Frequently; almost always	67%	33%	100%
		$X^2 = 219.2, p < .001$	

How often do you participate in decision making:	Would become a teacher again	Would not become a teacher again	Total
A. In staff development opportunities offered by your school or school district?			
As often as not; occasionally; seldom or never	56%	43%	99%*
Frequently; almost always	70%	30%	100%
		$X^2 = 142.6, p < .001$	
B. In evaluations of your performance?			
As often as not; occasionally; seldom or never	57%	43%	100%
Frequently; almost always	68%	32%	100%
		$X^2 = 104.4, p < .001$	

*Percentage sums do not always equal 100% because of rounding.

TABLE 3. (CONTINUED)

Part 2. TEACHER'S PERFORMANCE FEEDBACK AND GUIDANCE	Would become a teacher again	Would not become a teacher again	Total
A. Giving helpful information and suggestions?			
As often as not; occasionally; seldom or never	56%	44%	100%
Frequently; almost always	73%	27%	100%
		$X^2 = 207.3, p < .001$	
B. Your personal training needs?			
As often as not; occasionally; seldom or never	61%	39%	100%
Frequently; almost always	78%	22%	100%
		$X^2 = 1198.7, p < .001$	
C. Instructional problems and techniques?			
As often as not; occasionally; seldom or never	60%	40%	100%
Frequently; almost always	69%	31%	100%
		$X^2 = 549.5, p < .001$	
D. Your own performance?			
As often as not; occasionally; seldom or never	61%	39%	100%
Frequently; almost always	70%	30%	100%
		$X^2 = 773.2, p < .001$	

The Negative Consequences of Low Commitment

The absence of workplace conditions that provide opportunities for work-related fulfillment has profound and negative consequences for people's job-related commitment (Gecas & Schwalbe 1983). People recognize the real constraints and deprivations on their performance, and they have a clear sense of their low performance-based self-esteem. But because people invariably have the need to make self-enhancing judgments about themselves, the meaning and definition of success in these settings are often recast among workers in terms of behaviors and values that still allow them opportunity to derive a sense of esteem, status, and prestige.

Instead of rewards earned through job involvement, people redefine their task as simply to "make out" (Gecas & Schwalbe 1983). "Making out" behaviors—providing temporary relief from boredom, passing time, finding ways to leave the job, focusing more on social than on work relationships with co-workers, and so forth—and the sense of esteem that is derived from them are, of course, inversely related to productive labor. Stated differently, the work context no longer becomes a source from which self-esteem is derived; work becomes devalued and at the same time oriented toward satisfactions other than those that come from successful job performance.

This is essentially what Crozier (1964) found in his study of a highly bureaucratic clerical agency and an industrial production plant. Demands for workers' overcompliance to rules, regulations, and procedures produced patterns of low morale and indifference to, or outright resentment of authority. But workers exercised their own discretion to redefine the nature of their worth in areas not covered by rules, creating work-production problems. To constrain the exercise of workers' influence, management created additional rules to cover new dysfunctional behaviors, leading workers to experience greater depersonalization and estrangement from work, and creating new productively troublesome

behaviors in the few remaining areas that were not already regulated.

Teachers who are repeatedly denied professional empowerment, learning opportunities, and subsequent professional success also dysfunctionally redefine their work. We have already reviewed extensive findings on their absenteeism and workplace defection resulting from the absence of these workplace conditions. But there are other strategies that teachers employ simply to "make out." For one thing, they converse more with their colleagues about nonteaching-related matters and poor working conditions than on teaching problems, solutions, and new ideas (Ashton & Webb 1986; Little 1982; Glidewell et al. 1983; Rosenholtz in press). And this latter type of conversation is something of a paradox. Where colleagues repeatedly swap experiences about difficult work conditions—such as problems with parents and students and lack of administrative support for dealing with them—they bolster and reinforce their beliefs that any lack of teaching success is attributable primarily to external causes over which they can exert little control. Thus colleagues unwittingly convey the sentiment that no one can reasonably expect to succeed, and the necessary energy and effort required to muster and thereby overcome such obstacles is summarily dismissed as an unworthy, hopeless endeavor (Rosenholtz in press).

Teachers often take a second tactic to maintain their self-esteem where professional empowerment and subsequent instructional success are made unattainable by workplace constraints. They substitute definitions alternative to student learning as their measure of professional fulfillment. Several strategies are relevant here. Some teachers choose to focus more on friendships rather than professional relations with colleagues (Bishop 1977; Little 1982); some become union militants (Bacharach, Mitchell, & Malanowski 1985; Rosenholtz in press); some concentrate on developing good interpersonal relations with students, befriending rather than instructing them (Denscombe 1985; Rosenholtz in press); and, perhaps most damaging from the standpoint of student learning, some redefine their goals in terms of simply maintaining student control rather than making academic progress (Ashton & Webb 1986; Denscombe 1985; Levy 1970).

The essential point to emphasize in all of this is that the social and organizational conditions of schools are responsible for creating some of the major problems associated with teacher quality and commitment, and, just as powerfully, the social and organizational conditions of schools mold the strategies that teachers find most acceptable and appropriate to use.

In Summary

This paper has sketched in broad strokes some of the conceptual underpinnings of teacher commitment, and linked these concepts to studies from both industrial social psychology and research on teaching. Some of the data from the NEA CART survey were concurrently analyzed, illustrating with each analysis that the CART data clearly articulate with current understandings from other literature. It is worth emphasizing at this point that when the CART data were analyzed by teachers' grade level, gender, experience, and school locale (i.e., urban, rural, or suburban), no significant differences in respondents' answers were detected. The salient findings revealed that teacher commitment to the profession is significantly enhanced by—

- Encouragement and acknowledgement from building administrators;
- Empowerment of teachers to make decisions about classroom-related matters;
- Goal clarity and useful performance feedback, which increase teacher learning opportunities; and
- Involvement of teachers in decisions regarding their professional development needs and evaluative criteria.

It was shown that each of these practices relate strongly to teachers' success with students and their work-related self-esteem, thereby enhancing their willingness to renew their occupational choice.

A rather dismal and discouraging picture has also been painted of the consequences where these workplace conditions are absent: teacher dissatisfaction, alienation, absenteeism, or defection from the work force. Each represents a point along a continuum leading to lack of commitment, and all trigger the search for ways to salvage teachers' sense of self-esteem from the work setting *at the expense of student learning outcomes*.

Implications

While we have a substantial and growing body of knowledge on the workplace conditions that engender high teacher commitment and quality, the conditions themselves are certainly not new; nor, likewise, are the problems of teacher commitment. What is new, however, is that policy recommendations being imposed and implemented by various states and localities nationwide to improve the quality of their teaching forces more often than not run counter to our understanding of conditions that maximize teacher commitment and effectiveness.

And while any school changes can be developed, funded, supported, and delivered to schools to help them improve, the ultimate measure of their success depends to no small extent on *how* the intervention is executed. In this the teacher is pivotal. How teachers perceive and experience policy changes will affect their commitment to them and the extent to which the policy change will improve student learning. While any number of reforms might be juxtaposed against our cumulative knowledge, one example—widely embraced nationwide—will be briefly analyzed here: Minimum competency testing for students.

Minimum competency testing. A pivotal part of the current reform movement is the understandable focus on standards or goals for student learning. State or locally imposed minimum competency testing is often heralded as a viable means to bolster the external monitoring and control of the content of teaching, thus ensuring that students have opportunities to learn that content.

Several recent studies of minimum competency testing at the state and local level reveal uniformly high conformity by teachers to the guidelines set, as well as accompanying changes in teachers' instructional emphasis. But only a minority of teachers in these studies regarded minimum competency testing as a good management tool for either helping less competent teachers to do their jobs better or for ensuring that a specific body of knowledge is covered in the classroom curriculum (Darling-Hammond & Wise 1985; Resnick & Resnick 1985; Rosenholtz 1987). More, excessive pressure for conformity to curriculum content, rules for its implementation, and testing procedures to ensure its classroom coverage have had negative and unanticipated consequences:

1. The loss of task autonomy and discretion by teachers inhibited their ability to appropriately pace instruction. Teachers confronted an intractable dilemma between the *coverage* of required basic skills, on the one hand, and rudimentary *mastery* of them on the other. Paradoxically, these "standard raising" examinations ultimately caused teachers to focus on the lowest levels of student competence and restrict the range of what they taught, thus *lowering* that standard of education for all but the lowest-achieving students.

2. The need to ensure that their students passed competency tests forced teachers to de-emphasize other important aspects of the curriculum. For example, Resnick and Resnick (1985) found that teachers were omitting from their teaching those topics within math curricula—topics critical to the conceptual understanding of the subject—that would not be tested directly in a given year.
3. The overwhelming burden of additional paperwork, and the classroom time required to test were perceived by teachers to be needless encroachments on their teaching time. Indeed, valuable instructional time—the teacher's most prized learning resource—was considerably diminished by paperwork and testing demands. In fact, some teachers were forced to use classroom instructional time to meet the heavy burdens of increased paperwork demands.
4. The loss of psychic rewards resulting from less time to teach, overall lower student mastery of subject matter content, and loss of autonomy and discretion to determine when and what to teach, resulted, not unexpectedly, in lowered teacher morale and decreased commitment to teaching.

We see, then, that ill-conceived implementation of minimum competency testing placed new demands on teachers that created additional problems—lowered teacher commitment—that worsen the very instructional services the reform intended to improve.

Problems that arise from the implementation of new policy are, of course, not intractable. In the main, however, not enough information about teachers and teaching is utilized by policy makers to provide a steadfast base from which policy changes can be confidently launched. And without research knowledge brought to bear on policy decisions, in many of them we have the makings of a national educational failure at the very point in our history when we most need a major success.

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Improving the Learning Workplace: A Strategy for Action

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Introduction

In April 1986, NEA Research released the results of an extraordinarily powerful survey of conditions in our country's public schools. Known popularly as CART, this document gives us an insider's view of what changes are necessary to raise standards in our country's public schools. CART is unlike all the other reports on educational reform, ranging from *A Nation at Risk* to the recent Carnegie proposals, *A Nation Prepared: Teachers for the 21st Century*, for none of them is based primarily and exclusively on the evidence of teachers, evidence, that is, about the actual conditions of work in the classroom. As long as efforts toward educational reform are guided by outsiders, one can expect the results of those efforts to be ill-informed and, consequently, limited in value. The single most crucial element of educational improvement is empowerment of the teaching force on instructional resources and educational processes.

That is, teachers' insights and knowledge need to be much more strongly influential in setting schoolwide and districtwide policies on the following matters, among others:

- availability of instructional resources—space, instructional materials and equipment, instructional time, availability of professionally competent consultants to advise in solving the learning problems of individual students;
- schoolwide and districtwide personnel policies, including staff hiring;
- professional development, both preservice and inservice;
- interdistrict relations, especially with regard to participation in innovative and exemplary programs;
- establishment of conditions favorable to the conduct of applied research and to the dissemination of practice-related research findings;
- development of phased, multiyear programs of instructional improvement at the school and district level;
- consequent to all of the above, setting of budgetary priorities at the school and district levels.

Teachers have acquired an impressive range of influence on state legislation. Teachers have considerable autonomy in setting the style of the day-to-day work in the classroom. But there is a great vacuum of teacher influence at the school and district levels. As long as that vacuum exists, the influence of teachers on educational developments and processes—at the state level and in the individual classroom—will be far less effective than it might otherwise be, verging on impotence as far as real educational reform goes. The reason is that too many important decisions are made at the school and district levels from which teachers are presently excluded and toward which teachers are unable to offer their valuable knowledge and insights.

To begin to correct the situation, it would be tempting to seek out targets of opportunity and attack them, topic by topic, school by school, district by district. The temptation is probably not to be resisted. There will be some good results, but they may not yield, in total, a coherent, self-reinforcing, and long-lasting base of teacher power. This paper is intended to suggest that there may be a logical sequence in developing a power base and that there may be a case for approaching the task in a cooperative manner by teachers in different schools and districts. The suggestions offered here are not intended to be in any way exclusionary; other approaches may be better as far as the details go. The real question that this paper hopes to raise is whether the search for teacher power should be individualistic or should be organized in a comprehensive and systematic manner.

Brief Summary of the CART Survey

The CART survey makes the following points, in order:

- Teachers lack the resources to do their work. Resources essential in teaching are time (for counseling, grading, planning, instruction, workshops); space (storage, activities, classrooms); equipment, supplies, and materials (audiovisual, textbooks, workbooks, money to purchase supplies to enhance instructional projects as they develop week-by-week); technical assistance (for example, computerized instruction) and professional consultation as to how to handle specific learning problems; and opportunities to participate in functional programs of professional development.
- Teachers are seriously handicapped in their work by being excluded from decision making in the school district and at the school site. Teachers have almost nothing to say about organizational policies (such as staff hiring, budget development, and expenditure priorities), policies regulating student-teacher relations, and teacher development and evaluation. Even with regard to such matters as work allocation and teaching processes, teachers' knowledge and insights are not fully utilized.
- The communication process between teachers and administrators within the school is not satisfactory. A majority of teachers say that they talk only "seldom or occasionally" with administrators about their own career plans, training needs, their needs for resources, or their own performance. Administrators are not as helpful as they might be in clarifying what is expected of teachers nor in giving useful suggestions to teachers about how they might improve their performance.

Teachers Are Not Alone In Their Assessment

The CART assessment of how our schools can be improved has support from diverse quarters.

- The Holmes Group, a consortium of teacher educators, recommends making schools better places for teachers to work and to learn. "This will require less bureaucracy, more professional autonomy, and more leadership for teachers. But schools where teachers can learn from each other, and from other professionals, will be schools where good teachers will want to work. They will also be schools in which students learn more." (*Tomorrow's Teachers: A Report of the Holmes Group*, 1986, p. 4.) Speaking of the professional teacher, the Holmes Group states: "Professional Teachers would not only be effective instructors in the classroom, they would also be better prepared to serve in a very real sense as *child advocates*. They would be able to ensure that their schools and communities met the educational needs of students. They would understand enough about the role of educational 'experts' (i.e., school psychologists, social workers, reading specialists) to participate as equals when discussing issues relevant to a child's future. As research has demonstrated, many classroom teachers now defer to these experts in educational decision making, even when it may not be to the child's best interest to do so. When confronted with arcane test results, teachers—like parents—frequently feel disadvantaged in presenting their own, often more valuable, insights regarding a child's status and needs. The Professional Teacher would speak with legitimate authority on behalf of children. Thus, these practitioners would be more autonomous and responsible in making judgments about students than most teachers are today." (*Ibid.*, pp. 40-41.)

A second point of agreement. The research division of the Education and Training Department of the World Bank is highly respected for the studies it has conducted on the instructional effectiveness of schools. One of the strongest of the Bank's findings, drawn from data in both developing and industrial nations, points to the strategic importance of instructional materials and supplies. Provided teachers are well-trained and adequately paid and provided class size is reasonable (the big ticket items in educational budgets), no other item of expenditure can touch the power of a goodly supply of instructional materials and supplies in raising schoolwide standards of student performance. Giving greater priority to materials of instruction is highly cost-effective; in the general case it also offers quick returns. (S. P. Heyneman; J. P. Farrell, and M. A. Sepulveda-Stuardo, "Textbooks and Achievement: What We Know." *Journal* of *Curriculum Studies* 13, no. 2, 1981.)

Professional Power: A Sequential Approach

What follows is a nine-point program for enhancing the professional status of teachers. Because some things need to be done before others and because some tasks logically precede or follow others, the program is intended to be sequential. But it is not thought to be rigidly sequential—some tasks could be commenced before others are completed.

Task No. 1

To investigate the present and future legal status of the exercise of professional powers by teachers.

If teachers are to exercise greater powers at the district and school levels and if they are to get themselves more closely involved in the making of important decisions about district and school policy—if, indeed, they are to assume professional status as well as to become child advocates—then they must persuade members of school boards, on the one hand, and site administrators, on the other, to grant certain powers and duties to them or their authorized representatives on a more or less permanent basis. In some cases, a quiet request to assume certain responsibilities may suffice; in other cases, strong union action may be necessary to wrest power into the hands of teachers.

In any case, certain kinds of legal knowledge are supremely important. It is unlikely that in the near future teachers would want to replace school boards with teacher councils. What we are talking about is a greater degree of sharing of powers. This raises two questions immediately. First, under existing state laws and local ordinances, what powers of interest that are now held by boards and site administrators can be granted, delegated, or redelegated to teachers or their organizations or committees? Second, in those instances where school boards and site administrators cannot legally acquiesce in granting certain powers and responsibilities to teachers, is it constitutionally possible to seek changes in those state laws and local ordinances that impede the transfer of full or limited powers and responsibilities to teachers? With answers to these questions, teachers can better select the parties from whom to seek specific acts of empowerment: the site administrator, the school board, the local electorate, or the state legislature.

Here are some examples of matters on which teachers might seek answers to the above questions about sharing of powers:

- Can school boards provide funds to committees of teachers to support the preparation of reports on conditions of teaching in the district, to conduct needs assessments with regard to physical and human resources for effective instruction?
- If the boards have such power, may the boards allow the membership of such teacher committees to be determined strictly by local teachers' organizations?

  If teacher committees are provided the means to conduct investigations of the material and physical resources of school districts, are boards legally able to endorse the presentation of the findings of the teacher committees in public hearings, to provide suitable space for such presentations, and to pay for the announcement of the date, time, and place of hearings? NOTE: None of the above necessarily implies a requirement that the boards endorse the content of the teachers' reports nor approve their recommendations.
- May boards legally assign responsibility to teacher committees to make a survey of needs of teachers for various kinds of programs of professional development and may boards legally grant funds to teacher committees to meet the costs of such surveys?
- On the basis of findings from such surveys of teachers' development needs, may boards assign to teacher committees the responsibility to administer programs of professional development in the district and, subject to usual procedures of audit, provide a budget to teacher committees to meet costs of the program? May the funds so budgeted be used, in part at least, to pay stipends to teachers of the district who supervise interns and engage themselves in peer instruction?
- If teacher committees are granted powers to conduct programs of professional development in the district, may the boards allow the teacher committees to make contracts with boards of other districts to provide professional development activities in those other districts on a not-for-profit basis?
- May boards legally grant access to teacher committees to full, complete, and detailed data regarding anticipated budget receipts and expenditures?
- May boards grant powers to teacher committees to conduct annual budget analyses, based upon board-mandated cooperation from district financial officers and commencing at such time in the annual budget cycle that a thorough analysis can be conducted prior to budget adoption?

- May the boards endorse and assist in the public presentation of the results of the budget analysis as conducted by the teachers (again, this does not imply board approval of the teachers' recommendations)?
- Contract provisions aside, may boards grant teachers' unions the opportunity to meet and confer whenever the board's expenditure priorities and the expenditure priorities of the teacher's committees on budget analysis are judged to be in substantial disagreement?
- May boards legally petition advice from teachers' committees on districts' personnel policies and practices, specifically advice on teacher hirings, administrative appointments, transfers, job specifications, leaves, and travel? May the boards grant the right to meet and confer for substantial cause when teachers' views are in opposition to a proposed policy change, contractual matters aside, or a proposed personnel action?
- May boards supply funds to support practice-related research of teachers, including funds for preparation of survey instruments, computer programming, data analysis, manuscript preparation, seminars, and publication of research papers of teachers?
- May boards encourage the active participation of teachers in five-year and annual-development plans for schools and school districts?

This list of queries is intended to be illustrative and the questions are directed to school boards. Some of the queries might apply to site administrators as well, but there would also be opportunities to seek power-sharing in the school site on interpretation of test results, student discipline, teacher assignments and transfers, extracurricular activities, and processes of teacher-administrator communication.

One may surmise that the legal limits constricting teacher power are wider, once they begin to be explored, than one might first have thought. Boards and site administrators may be able to grant teachers a more powerful voice in educational decisions in the absence of massive changes in state education codes and local ordinances. Even where the answer to the above kinds of inquiries is "no," this doesn't mean that all action stops. Teachers would then need to bring public pressure to bear to accomplish the necessary in revision and repeal of laws. After all, to put teachers' professional knowledge more widely and cogently to use in educational decision making can only help the country's schools.

Task No. 2

To conduct an inventory of the material needs of the district and its schools in order to provide more effective instruction.

The second suggested step in bringing teacher influence to bear on district policy is to conduct an inventory on the physical needs of the district for effective instruction. Comparatively speaking, this is a reasonably straightforward task. The two main components are space and instructional supplies and equipment. For the recommendations to be credible with the public, two things at least are necessary: first, the public must be informed dramatically about existing deficiencies and their effects on children and learning; second, the recommendations for more space and more materials must be sensible, not wildly extravagant. Anything that can be said about more efficient utilization of space or sharing of supplies and equipment wins big points with the public.

It will be necessary to estimate costs. Multivear phasing of major expenditures is generally a good idea, except in times of high inflation. If new construction of buildings is called for, as distinct from renting, leasing, use of found space, and so forth, one must remember that almost all school buildings are paid for over time. To estimate annual payments and the effect on the school tax rate, one uses something called a "bond table." These are not hard to prepare, but a little friendly advice from a banker or accountant is helpful to get started. For capital structures, an adequate allowance for maintenance should be included.

It would be unusual if all teachers were in complete agreement about the physical needs of schools and the district. Where possible, differences should be accepted: certain things for these teachers in these schools, other things for other teachers in other schools. Where this doesn't work, it would seem best to stick with those recommendations on which there is substantial agreement.

It would be best if the inventory could be conducted with the endorsement and support of the board and under the anticipation that the board would assist in the dissemination of the findings to the public. If cooperation is lacking, relying upon volunteers and having teachers present results to the public on their own would be the way to go.

There are some special reasons why such an inventory might come early in the quest for teacher power. Material needs are more easily understood by parents and

the public than are, say, needs for consultants' services, sabbaticals, and so on. The effects of improving the supply of physical resources can ordinarily be observed by parents and other interested parties more quickly than can changes in other educational resources or, possibly, one should say that they can be more concretely observed—new buildings, more and better workbooks, and the like. Also, a rather handsome relative increase in physical resources can ordinarily be obtained for modest increases in the total district budget. All of which says that physical resources are the politically strategic resources and the ones that are worth an early attack.

Task No. 3

To conduct an inventory of the human needs of the district and its schools for more effective instruction.

In taking up the third step in the exercise of teacher power, representatives of the union might shift their attention from material to human resources. This shift takes us into questions of greater complexity. It may be harder to reach agreement about the needs of schools and the district for specific types of human resources. Acquiring more appropriate human resources will yield results in the more distant future, as compared with improving the supply of material instruments of instruction, but the results ultimately will be more powerful.

There are, it would appear, three main questions to deal with: (1) availability of time for teachers to perform their duties in a professional manner; (2) availability of human support services; and (3) control of professional assignments. Let us consider these questions in order.

Availability of Time. Teachers need time for counseling, grading papers, and planning, all in addition to the time required for classroom instruction. Also—and these are matters often overlooked—teachers should be provided time for peer tutoring of their colleagues, for supervision of interns and teachers in residency status, and for research and writing. These latter kinds of professional duties are grounded on the assumption that teachers are provided time to study, in order that they may keep up-to-date in their disciplinary fields and in pedagogy.

Availability of Human Support Services. Teachers, like any other professional working in a complex field of human endeavor, require advice and counsel from highly qualified consultants, drawn from both within and outside the school district. It should be teachers' prerogative to specify the qualifications of consultants who are needed. It should also be the prerogative of teachers to specify the amount of consultants' time that is necessary to handle different types of instructional problems. The consultants should be available on the call of teachers and should be expected to respond within a reasonable time of the teacher's request for help, for help deferred is oftentimes useless. The new system established should stand in sharp contrast to the system now employed in some school districts, where full-time district employees, carrying titles like supervisor, director, and curriculum coordinator visit classrooms on their own schedules, not so much to deal with specific inquiries of teachers as to "see how the teachers in my charge are doing."

Control of Professional Assignments. No teacher should be forced or enticed to take an assignment for which she or he feels less than fully prepared. Teachers should therefore (a) prepare a plan for upgrading of teachers who presently are teaching out of station and (b) seek a pledge from the school board that in the future all openings for teachers and other professional staff shall be staffed by persons who are fully qualified for the specific assignments. Teachers should seek to persuade boards to adopt local standards of professional qualification for specific assignments, such standards being drawn up collaboratively with teachers. Where a new kind of position is proposed for the district, hiring should take place only after a set of professional qualifications has been developed and has been accepted by the teachers. A set of professional qualifications for a position is not the same thing as a job description. The latter says what the person is expected to do; the former describes the attributes that are required to perform the work at a high professional standard.

In making an assessment of the human resources required in schools and districts, teachers should estimate realistically the costs that would be associated with any changes they propose. Ordinarily, it would be appropriate to prepare a multiyear plan of implementation, for most inventories are likely to show greater needs than can be met immediately. If a multiyear plan is called for, teachers must agree upon a set of priorities for action.

Task No. 4

To develop a plan for professional development of teachers and other professional personnel in the district.

As it stands now, many districts incorporate awards for satisfactory completion of units of "in-service training" in their basic salary schedules. That teachers who acquire additional skills should receive higher pay is eminently sensible; nevertheless, most programs of professional development for teachers do not work very well. A basic problem is that these programs are not informed by, nor are they designed around, teachers' needs for specific kinds of additional training and practice to improve the effectiveness of their work with students. Typically, teachers enroll in a nearby college or university and take courses offered in departments of education. Faculty in departments of education decide what it is they want to teach and they are solely responsible for making judgments as to whether teachers have done acceptable work in the courses so offered. Otherwise, of course, no salary credit. Teachers are thoroughly dependent consumers in monopolistic markets established by college and university departments of education. For persons who aspire to administrative positions, the process is similar but somewhat more complicated. State departments of education specify the content of programs that lead to various administrative certificates. Teachers have no effective voice in determinining such content nor are they able to monitor the quality of instruction that is being offered to intending administrators.

Teachers should bring their own knowledge of their needs for additional capacities, skills, and understandings to bear upon the processes of professional development, and they should be active providers of training in those fields in which they have special competence. This implies that several important steps should be taken. First, teachers should prepare a short- and long-term plan for professional development of teachers. This plan should be based initially on a needs assessment conducted by teachers, followed by an assessment of training capacities that are presently available in the district itself. An important objective is to shift the locus of professional development from colleges and universities to the district itself—not exclusively, but in the main part.

Second, teachers should prepare a budget to cover the costs of professional development. Included in the budget would be released time for teachers to engage in peer tutoring and to conduct seminars; fees and honoraria for teachers in the district who conduct these kinds of instructional activities; fees to hire outside consultants when local talent is not available on a particular topic; travel funds to visit experimental programs in other districts, conferences, and conventions; and funds for sabbaticals.

Third, teachers should establish themselves as an advisory body to the school board on the training needs of the district's administrators. The content of training embodied in administrative credentials should be regarded as a minimum only. Ultimately, teachers should acquire power at the state level to advise on the training content of administrative credentials and to monitor the quality of instruction being offered to intending administrators.

Task No. 5

To acquire effective power to participate in the district's budgetary processes regarding the district's overall budgetary priorities.

Organized teachers participate effectively in the budgetary process on salaries, class size, and certain other major expenditure items. What is proposed here is that teachers participate in activities concerning the budget as a whole. Actually, the main reason for carrying out Tasks 1 through 4 is to apply the knowledge gained about distribution of powers, the needs of the district for material and human resources, and the needs of teachers and administrators for professional development, to shape the distribution of monetary resources presently available to the district among competing functions and objects of expenditure, on the one hand, and to make a case to the public for appropriate additions to the size of the budget, on the other.

It is therefore suggested that teachers prepare two annual reports: "The State of Education in District Alpha," and "Budget Priorities in District Alpha for the Year 198X-8Y." These reports would be presented at one or more well-publicized meetings, meetings held, one would hope, with the collaboration of the school board, though such collaboration would not necessarily be essential. In many districts, one could imagine that the meetings would be of interest to parents, especially insofar as attention was given to conditions of learning that affect their own children.

It is recognized that teachers in some districts might find the process described just above as unsettling, in that the public might appear to become persuaded to assign a lesser priority to teacher salary advances, say, and a higher priority to other forms of developmental expenditures. In case that risk might appear too high, teachers might seek to influence board decisions on the budget in a less formal fashion.

Task No. 6

To participate in the preparation of longer-term development plans for instructional activities in the district.

The most productive way for a potential conflict—between, first, teachers' needs for salary increases today and, second, the needs of the district to spend money on other kinds of developmental projects—to be resolved is for districts to prepare five-year development plans—and, in some cases ten-year plans as well. The work of preparing such plans starts with projections of school enrollments in the different attendance areas of the district. Next, the revenues of the district are projected under a series of alternative assumptions about state aid, changes in the size of the local tax base, and changes in local tax rates. Then, projections of expenditures, both operating and capital, are prepared under alternative assumptions about salary levels, class sizes, administrative staffing ratios, and the various developmental expenditures discussed here: extra space for teachers' use, improved materials of instruction, adequate time for teachers to perform their professional duties, on-call services of consultants, budgets for professional development activities, and so on. If the planning process jells and consensus is reached on a particular revenue projection (and its accompanying change in local tax rates) and on a particular expenditure projection, the district may be in a fortunate position. On the other hand, teachers should reserve the right to sign on for some parts of the plan while disapproving or withholding judgment on other parts. The question one is really asking is this: What do we want this district to look like in five years, i.e., what improvements are in our grasp?

If teachers participate fully in this planning process, there could be at least three important benefits. First, the matter of increases in teacher salaries versus other kinds of developmental outlays becomes much less of an "either-or" proposition. Improvements in nonsalary expenditures can be phased in over a period of several years. A typical district can absorb only so much nonsalary expenditure in any given year anyway; hence, there is little to be lost by a stretch-out. But at the same time, it is important for parents and other members of the public to understand that significant improvements are in the works. These significant improvements may not be visible if one looks at single-year budgets only. Second, the plan would be informed by the kinds of knowledge that are available only from members of the teaching force—and by their judgments. Third, in the process of working on the plan, teachers would acquire new kinds of information that would help them in their important role of child advocates.

Task No. 7

To develop the means to engage in professional activities with teachers of other districts.

Some districts are so small that teachers would find it difficult to pursue all the tasks of professionalization listed above, much less those yet to be noted. In such cases, the teachers might wish to seek a more or less formal agreement from the school board that they are entitled to share in professionalization activities with teachers in other, presumably nearby, districts. At the other extreme, it is clear that very large urban districts have their own special problems in educating youth. It might be appropriate if teachers of large urban districts formed a consortium for professionalization activities, notwithstanding the fact that the districts are spatially separated. The strength of such consortia of teachers would be enhanced, most likely, if their activities received formal sanction from the respective school boards. Aside from these instances related to district size, it might be appropriate for teachers in almost any district to develop joint programs for development of professional staff with their neighbors.

Task No. 8

To reach agreements for participating in programs of preservice training of teachers.

Just as teachers have too little to say about processes of in-service training, they have also been denied a voice in the design of preservice programs of training of teachers. Nor does one find many teachers serving as part-time or adjunct faculty in those colleges and universities that prepare the majority of new teachers in this country. These facts are among the most grievous lapses in, or insults to, the professional status of classroom teachers. It says, contrary to rational belief, that the knowledge and insights of the practicing teacher are worthless to teacher trainees as they go through the formal parts of their preparation. The next ten years will see a great deal of activity aimed at reforming preservice training programs. Teachers should seek board sponsorship to negotiate arrangements for formal participation in the design of new or modified training programs in the colleges and universities of their regions.

Likewise, teachers should seek board sponsorship to negotiate the creation of a set of rotating adjunct professorships for practicing teachers in the colleges and universities of the region. Not only would preservice programs be strengthened by this step, but the districts would also benefit as the adjunct professors bring back new ideas and theoretical insights to share with their colleagues in the classrooms.

Task No. 9

To establish a resource base within the district for practice-oriented research by teachers.

Most educational research that sees the light of day is conducted by people who are not classroom teachers. Indeed, much of it is done by persons who have not been in a classroom since they were students. This may account for a good part of the sterility of much educational research today. It means, moreover, that teachers fail to receive their due recognition for their contributions to the knowledge base of their own field.

In order to correct this deplorable situation, teachers should negotiate with school boards to establish a teacher research center in each district with 50 or more teachers. (This is an entirely different kind of office than the "office of research" that is attached to many superintendent's quarters.) The teacher research center should be staffed with survey research specialists and statistical data analysts. One each would be sufficient in smaller districts. Just how many would be needed in larger districts can only be determined by experience. The staff in the teacher research center would be employed primarily to assist teachers in the conduct of the teacher's research, not to run projects on their own. The teacher research center should have at least one secretary to make appointments, send out and receive data instruments, answer mail, keep teachers informed about upcoming conferences and conventions, and, as time allowed, do bibliographic searches. The center should have duplicating equipment. It is important that it have an adequate supply of personal computers, mainly for use as word processors, because much of the research done by teachers will be in the form of narrative case studies. It would be excellent if the teacher research center, under board sponsorship, negotiated agreements with the colleges and universities of the region to allow teachers engaged in research to have access to their libraries and parking facilities during the periods when the research of a particular teacher was in progress. This would obviate the need for a teacher to enroll in courses to obtain these privileges. Lastly, all the teacher research centers in a given region should hold a conference, at least annually, to allow teachers to share the results of their research work. Faculty from colleges and universities should be invited.

In Summary

On the basis of the CART survey, it is now clearly to be seen that teachers suffer decisional deprivation, lack both the material and human resources to perform their work to the high standard of which they are capable, and are forestalled from making their rightful contribution to the development of their field of work, especially in its training and research aspects. This paper offers a nine-point, staged program of professionalization. The earlier stages are intended to be easier than the later ones and, in general, the early stages are intended to offer quicker results than the later ones. To create the reality of a teaching profession will take much time and work. The several tasks can be accomplished only by teachers themselves, but the rewards for both teachers and their students should be immensely gratifying.

Improving the Learning Workplace: Can We Afford the Cost?

E. Gareth Hoachlander

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Introduction

Since the Commission on Excellence issued its ominous assessment of the condition of education some four years ago, policy makers at all levels have been scrambling to find ways to improve the effectiveness of teachers. Career ladders, merit pay, master teachers, mentor teachers—variations of these and other ideas have been proposed and sometimes implemented in a number of states around the country. Pending the results of some good empirical evaluation of these policies, the verdict on their merits is still not known. A recent study conducted for the National Education Association, however, is not optimistic.[1] It argues that these policies mistakenly assume that public education is suffering because teachers lack the motivation to teach. The real problem, this study asserts, is that schools lack the resources to create working conditions conducive to effective teaching and learning. More time for planning and professional development, better support from administrative and specialized staff, increased authority over organizational decision making, larger space for classroom activities, higher expenditures for supplies and materials, and improved knowledge and skills—these are the requirements for significantly improving the effectiveness of public education in America.

Few will disagree that more resources would be desirable or that working conditions could be improved, especially in large urban districts struggling with high costs, overcrowded and aging schools, and high concentrations of students with special needs. However, many will first ask: *Can we afford it?* Significantly increasing the resources available to teachers, in addition to raising teachers' salaries to levels competitive with other professions, would seem to be an expensive proposition, and many will argue that the funds simply are not available. Can we, then, afford improvements in working conditions?

In this paper, we provide a framework for answering that question. We offer some guidelines for determining what different strategies for resource enhancement will cost and for assessing their relative merits. We contend that much can be accomplished simply by carefully reallocating existing resources; some improvements in working conditions can be realized at no additional cost. Other improvements will require small increases in existing expenditures, and still others will not be possible without substantial new revenue. A methodology for sorting out which strategies are no-cost, low-cost, and high-cost is the primary aim of this paper.

This is a methodology that teachers and their agents can use, and we have tried to avoid jargon and to explain concepts and procedures clearly and simply. We believe that teachers, individually and collectively, should be cost-conscious. Teachers must be prepared to offer positions on how resources get allocated, not merely to teachers' salaries and benefits but throughout the various components of the educational enterprise. Leaving such decisions to management or to technicians is abrogating a large part of teachers' power to create a pleasant and effective working environment.

[1]See Samuel B. Bacharach et al., *The Learning Workplace: The Conditions and Resources of Teaching*, pp. 9-40 of this publication.

An Analytic Toolkit: Some Economic Principles and Other Concepts

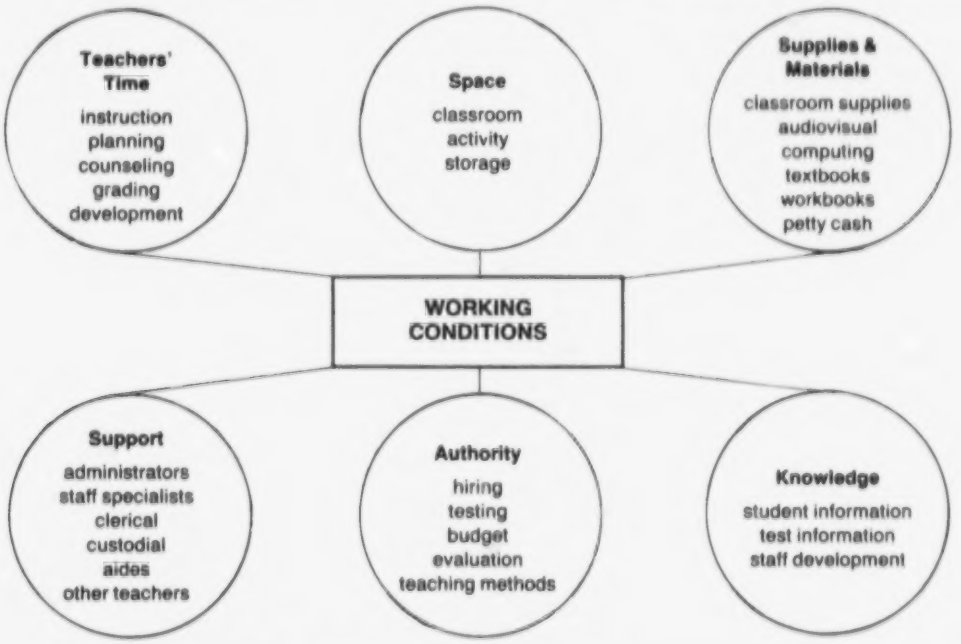
Figure 1 displays the six major categories of resources that affect working conditions and the effectiveness of teachers:

- Teachers' Time
- Space
- Supplies and Materials
- Support
- Authority
- Knowledge

To better understand how these resources affect working conditions and to better determine the costs of different strategies for increasing and mixing these resources, we need to understand a few basic economic principles.

Our first principle is so obvious that you will wonder why economists dare lay claim to its discovery. Put simply, in general, more is better. Increasing any one of these resources, while holding the others constant, will improve working conditions and teacher effectiveness. For example, increasing the amount of time a teacher may spend with individual students (by reducing class size) or the amount of time teachers have to prepare lessons is likely to improve effectiveness. So will providing more space to erect class projects or to store equipment. More equipment will reduce the need for students to share and will accelerate learning. The availability of specialized staff to help a teacher with students with special needs will reduce the time teachers spend trying to determine how best to solve a particular teaching problem and will free time for other uses. Similarly, increased authority to make decisions will reduce the time spent seeking permission to do certain things or to make certain purchases. Greater knowledge about students' different abilities and how to handle special problems will also improve effectiveness.

FIGURE 1.
RESOURCES AND WORKING CONDITIONS



But, you say, the notion that "more is better" is not very profound. Indeed, it is the cost implications of this very notion that intimidate policy makers. It invites the response, "Yes, that would be nice, but we can't afford it." To put this principle in perspective, two corollaries need to be clearly understood. First, if more is better, then still a little more will not be quite as good. Economists call this "the law of diminishing returns." For example, adding one aide to the classroom will increase a teacher's effectiveness. Adding a second to the same classroom will produce an additional gain but probably not as much as the first, and a third will not produce as much as the second. Thus, while the cost of adding an additional aide remains constant, the benefits per aide decline as more aides are added. As we shall see, one of the fundamental problems of resource allocation is to determine when the additional benefits no longer justify the additional costs.

This law of diminishing returns leads logically to a second corollary: more of one thing is not necessarily as effective as more of something else, even if they both cost the same. This simple corollary is deceptively important. It means that while more of any resource will lead to some increase in effectiveness, a given amount spent to increase one resource may produce greater gains than the same amount spent to increase another. For example, assume that it costs an average of $15,000 to reduce class size from 25 to 20 and that for the same $15,000 it is possible to add a full-time aide to the classroom. Both strategies will improve working conditions and effectiveness. The first will increase the average time of the teacher for each student by 25 percent, while the second will increase the amount of adult time per student by 100 percent and will allow the teacher to devote more time to the things for which he or she has been specially trained. In all likelihood, the addition of an aide is the more "cost-effective" or the more efficient of the two choices.

This example helps to establish a second principle: sometimes less is more. If resources have been improperly allocated, working conditions and effectiveness can be improved at no additional cost by reducing expenditures on one resource and increasing expenditures by the same amount on another. For example, in the NEA Conditions and Resources of Teaching (CART) survey data, an astonishingly low percentage of teachers, only 13 percent, rated in-service training programs provided by their schools as "definitely effective" sources of improved knowledge and skills. If this is true, either in-service training must be radically modified or the dollars devoted to it can be better spent on some other resource. This, in a nutshell, is what economists mean when they talk about increasing efficiency. But how do you know when efficient allocation has been achieved?

Economists have a rule for judging whether an efficient mix of different resources has been achieved. It says: for any given budget, continue to adjust the mix of resources until the last additional dollar spent for each resource yields the same amount of additional benefit. We know from the law of diminishing returns, that the first dollar spent on a particular resource will yield a greater return than the next dollar. Consequently, once we have spent some money on one resource, before spending any more on that resource, it will behoove us to look around at our other resources to see if we can get a greater return by increasing spending on one of those. When we reach a point where we are indifferent about the choice of where to spend additional dollars because we judge the additional benefit to be the same regardless of how the money is spent, we have reached an efficient allocation of our resources.

How difficult it is to follow this simple, sensible rule of efficiency! In education, as in all other fields, it is easy to become enamored of certain fads (educational television and computers, for example) that lead to sometimes mindless expenditures of funds. Additionally, having grown accustomed to a particular way of doing things, we fail to challenge potentially inefficient practices (e.g., limiting the use of school buildings to 180 days per year). Later, we will argue that there are many more no-cost opportunities for improving working conditions and teacher effectiveness than most people imagine, if we are willing to look carefully at how we have organized schools and the delivery of instruction.

Achieving efficient allocation of resources, however, is hampered by more than a fascination with fads or an unquestioning acceptance of the status quo. Efficiency is also difficult to achieve because it is often hard to measure the costs and benefits of allocating resources in a particular way. Consequently, we need a few more concepts in our toolkit before going to work on how best to allocate resources to improve working conditions.

Identifying and Measuring Costs

"An economist," someone once said, "is a person who knows the cost of everything and the value of nothing." An unfair judgment certainly, but economists do have much to teach us about costs. For most

of us, "costs" are the prices we must pay to purchase goods and services, and while this notion will help us evaluate different strategies for allocating resources, it is not sufficient. An example will illustrate why.

Let us examine the "costs" of a teacher attending a two-day workshop as part of an in-service training program. Some of the costs are immediately obvious and consistent with our conventional notions of prices paid—e.g., the cost of travel to and from the workshop, lodging, meals, workshop fee, and so on. But there are other costs, as well. Indeed, these may even exceed the costs of travel, lodging, meals, and fees. For example, what is the cost of the teacher's time? The two days the teacher spends attending the workshop are two days the teacher could have spent doing something else—teaching, planning, grading, meeting with other teachers, or even relaxing. Thus, the cost of the teacher attending the workshop is the cost of the other foregone opportunities for spending the time in another way. Economists call these "opportunity costs," and they often figure prominently in analyses of the costs of different strategies for allocating resources.

It is not always easy to place a value on these opportunity costs, but neither is it impossible. In the example above, if the teacher attends the workshop during a regular school day, the opportunity cost can be estimated by the cost of the substitute teacher who must be employed to teach the classes during the teacher's absence. If attendance occurs during a paid work day when children are not in attendance, the cost is equivalent to the teacher's daily rate of pay, because a day of teaching could be substituted for each day of workshop attendance. If the teacher attends on a weekend or during holidays, the opportunity cost would depend on how the teacher values leisure time, for this is what has been foregone to attend the workshop.[2]

We will be relying heavily on this concept of opportunity costs for assessing the pros and cons of different ways of using resources to improve working conditions and teacher effectiveness. It is a critical consideration in any analysis of how resources ought to be deployed.

[2]This amount might be more or might be less than the daily rate of a normal workday. If viewed as "overtime," the cost of time spent at the workshop probably exceeds the normal daily rate of pay. However, if viewed as partly recreational, the opportunity cost is probably less.

Measuring Benefits or Effectiveness

Thus far we have simply asserted that changes in how resources are allocated will affect working conditions and the effectiveness of teachers. Determining how best to allocate funds among different types of resources, however, depends on our ability to measure the effects of different strategies on working conditions and effectiveness. As with measuring costs, this is not always easy to do but neither is it always impossible.

The first requirement for measuring benefits is to get clear about precisely what it is you are trying to accomplish. For example, let us posit that the more teachers feel they are spending their time doing things that contribute directly to teaching, the more favorably they view their working conditions. Hours spent supervising lunch rooms, halls, and playgrounds, filling out forms, scavenging for supplies and materials, scrubbing classroom windows, and attending worthless workshops are hours that are not likely to contribute to a teacher's sense of accomplishment as a teacher. Hence, one way of measuring the effectiveness of different resource deployment strategies is to assess the relative costs of different approaches to reducing the amount of time teachers spend on such nonteaching-related tasks.

Time can be used in other ways. For example, teachers usually have some feel for the amount of time they spend trying to figure out a way to convey a particular concept to a student with a learning disability. Strategies that reduce this time (access to a learning specialist, for example) may be cost-effective if the cost of the strategy is less than the cost of the teacher's time spent trying to find a solution to the problem. Increasing classroom space may produce time savings because teachers need to spend less time moving equipment and other materials in and out of storage, erasing blackboards, or changing bulletin boards.

In short, measures can usually be found if you are clear about what it is you are trying to accomplish and can be somewhat creative in thinking about measurement. Certainly not all benefits are measurable, but if you cannot come up with measures, it is worth at least considering whether you really know what it is you are trying to do.

Toward an Analysis of Alternative Strategies

We now have the basic tools we need to begin assessing different ways of allocating resources to improve working conditions and teacher effectiveness. In considering various options, we will attempt to distinguish between strategies that are no-cost, low-cost, and high-cost. Let us briefly consider what we mean by each of these.

A no-cost solution is one that requires no additional expenditures beyond what exists in the current budget. Essentially, improvements are realized through gains in efficiency that result from deploying resources in different ways. In looking for no-cost strategies, consideration will need to be given to what constraints must be imposed. For example, is the distribution of personnel across job categories fixed, or may the mix of teachers, aides, administrators, clerical staff, custodial staff, kitchen staff, and so on, be altered? If the distribution cannot be altered, then are there any constraints on how people spend their time? Clearly, the greater the constraints, the more difficult it becomes to develop no-cost solutions because the allocation of resources becomes more and more fixed and change is not possible.

Let us define a low-cost strategy as one that would not require more than a 5 percent increase in the budget of a classroom, school, or school district. Such strategies then could be implemented rather quickly, say within a year or two, and do not involve great losses if some turn out to be less effective than supposed.

A high-cost solution, then, will be any strategy likely to require more than a 5 percent increase in amounts currently budgeted. Admittedly, this may be a conservative definition of "high-cost," and users of the methodology may want to alter the definitions to suit their own judgments.

Evaluating Alternative Strategies: Some Practical Examples

Using the concepts described above, let's consider some possible no-cost, low-cost, and high-cost strategies for improving working conditions and teacher effectiveness. Our examples are intended merely to suggest some possibilities and to illustrate how to use some of the basic analytic tools. You will probably be able to invent alternatives better suited to your local circumstances.

Increasing the Effectiveness of Teachers' Time

By far the single greatest resource that schools must manage is teachers' time—representing in most schools well over half of the total operating expenditures. How might we increase the effective use of this resource? One way to start is to examine closely how teachers presently spend their time in a hypothetical school. Suppose we could agree that time teachers spend in instruction, planning, counseling, grading, and development is generally more effective use of their time than time spent doing other things. Let us also assume that teachers enjoy their jobs more when they are doing things that they consider make effective use of their time. To understand the potential for increasing the effective use of teachers' time, we first need to know how their time is divided between more effective and less effective uses. To find out, we conduct a survey in our school, asking teachers to estimate the amount of time during the course of a typical week they spend on various tasks—teaching, filling out forms, making reports, grading, counseling, supervising the playground, and so forth.

From our survey, we discover that our teachers spend 80 percent of their time on what we consider to be effective uses and 20 percent on ineffective uses. We further calculate that the teachers in our school have an average salary, with benefits, of $30,000. There are 12 teachers in our school, so we determine that our school is wasting $72,000 (20% × 30,000 × 12) on ineffective uses of teachers' time. How might we reduce the amount of time teachers spend on ineffective tasks?

One possibility, of course, is to substitute less skilled and therefore lower-paid personnel for some of the time teachers spend on ineffective tasks. Aides, for example, can keep attendance, fill out forms, supervise lunch rooms, order supplies and materials, and do a variety of other things teachers often have to do. Suppose from our time study, we determine that aides could, in the same amount of time as teachers, perform tasks that consume half of the time teachers spend ineffectively. Assume further that aides in our school are paid, on the average, $20,000 in salary and benefits. Then, by spending an additional $24,000 on aides, we will free up $36,000 of teachers' time to be spent on the more effective tasks. This is the equivalent of 1.2 teaching FTE in our hypothetical school of 12 teachers.

This is all very nice, you say, but my school does not have $24,000 to spend on aides so we're stuck with teachers having to spend their time on these nonprofessional chores. You promised us some no-cost solutions. But look closely; this really is a no-cost solution—indeed it produces a savings of $12,000, which could be used to improve working conditions further

by purchases of supplies and materials or other resources. If for two-thirds of the cost, aides can do half of the tasks that do not make effective use of teachers' time in your school, then everyone will be better off if 1.2 FTE aides, costing $24,000, replace 1.2 FTE teachers, costing $36,000. The remaining 10.8 FTE teachers will be able to devote 90 percent instead of 80 percent of their time to the tasks they do best, with an additional $12,000 to spend to increase other resources.[3]

In many schools it is likely that some reduction in the time teachers spend on nonprofessional tasks can be achieved by substituting less skilled and less costly personnel to perform these tasks. However, eventually we will reach a point where no more gains can be realized, either because the time spent on ineffective tasks has been reduced to zero or because further reductions cost more than they save (remember the law of diminishing returns). At this point the only way to increase the amount of time teachers have available for instruction, planning, and so forth, is to actually increase the amount of teaching FTE, an action that is either low-cost or high-cost depending on the extent of the increase. Such increases could take the form of lengthening the school day or school year or adding more teachers to allow a general reduction in teaching load to create more time for planning, counseling, grading, or development.

Creating More Space

School buildings represent some of the most underutilized resources in public education. Fully occupied for only 180 or so days a year, for six to six-and-a-half hours a day, there should be many opportunities to use buildings more efficiently and free up space to improve teaching effectiveness. Some severely overcrowded schools have been forced to find ways to use their facilities more efficiently—for example, adopting double sessions or year-round calendars. But all schools would benefit from a careful analysis of how they use space and from some critical thinking about how they organize the school day and the school year.

Aside from the fact that we have always done it this way, why is it necessary for all students to arrive at school and leave at the same time? More flexible scheduling can produce some substantial space efficiencies—reducing classroom overcrowding, allowing more space to be set aside for specialized activities (e.g., art, music, physical fitness), and creating more storage area. The cost of these gains in space from using schools more intensively (i.e., for more hours per day or more days per year) will depend on several factors. Climate, of course, will be a major consideration in many areas. Using schools during summer months will require air conditioning, and retrofitting a school may well be an expensive proposition. If, however, these capital outlays are spread over the useful life of the equipment, the annual costs are likely to be quite modest in relation to the total school district budget and well within our low-cost limits.

In addition to added capital costs, using schools more intensively will also increase operating costs. Maintenance, for example, will certainly increase but as maintenance presently accounts for less than 1 percent of most school districts' budgets, the relative costs of increased maintenance are very little. Administrative and clerical costs will also be higher. Currently, expenditures for administration average between 10 to 15 percent of most school district budgets, and many of these personnel already work year-round and eight hours per day. Consequently, increases in administration for more intensive use of schools are not likely to be high-cost items.

When more space is desired, the costs of using schools more intensively should be compared to the costs of the alternatives, building or leasing more space. More intensive use is the appropriate strategy as long as the costs of using existing space more intensively are less than the costs of building or leasing an amount of space equivalent to the space gained from using a school for more hours per day or more days per year. There are limits, of course, on the gains that can be achieved from more intensive use of space (the law of diminishing returns again), and at the point when more intensive use no longer is less expensive than building or leasing, it is time to switch strategies.

Supplies and Materials

In most school districts, expenditures for books, supplies, and equipment replacement average about 4 or 5 percent of total expenditures. Therefore, if increasing these resources can be shown to make teachers more effective, increases are not likely to be high-cost items; one could double what most districts spend on supplies and equipment replacement and still stay within our 5 percent limitation.

[3]The proposal that 1.2 FTE aides "replace" 1.2 FTE teachers may cause some concern. It is intended that "replace" be viewed more as an opportunity to reallocate trained resources than as a rationale for reductions in the teaching force. Careful analyses of local conditions such as enrollment trends, class size levels, and other instructional needs will inevitably reveal ways that school districts can capitalize on the availability of these trained professionals.

Moreover, some expenditures on equipment may provide no-cost solutions to increasing the use of teachers' time on more effective tasks. Just as it may be possible to substitute lower cost labor for some of teaching FTE, it may also be possible to substitute capital. For example, a personal computer costing $1,200 will pay for itself in three years if it frees up just 7 minutes a day of a teacher's time to perform more instruction, counseling, planning, and other tasks that contribute to more effective teaching. It is quite easy to think of ways a computer might save 7 minutes a day when used as both a teaching and administrative tool in the classroom. Unfortunately, too often in public education, we fail to assess the potential returns on investing in equipment. We simply assume we cannot afford it, when, in fact, we would be better off making the expenditure.

Support

The typical school district now spends about 5 percent of its budget on instructional aides, librarians, counselors, and other classroom support personnel. Hence, once again, if increases in support personnel can be shown to increase teacher effectiveness, these are not likely to represent high-cost items. Moreover, as we have seen with other resources, an increase in spending for support can actually lead to savings overall. If, for example, a specialist can solve in one hour a problem that takes a classroom teacher two hours to solve, it is more efficient to have the specialist deal with the problem than the classroom teacher. A school will save money and use teachers' time more effectively the better it understands how specialists and other support personnel can free teachers to do what they do best.

Authority

At first blush, increasing teachers' involvement in decision making would seem to be at odds with the desire to maximize the time teachers spend on instruction, counseling, planning, and other tasks. Making decisions takes time, time that could be spent on other things. Yet, if leaving teachers out of important decisions results in poor decisions that reduce teachers' effectiveness, empowering teachers with more decision-making authority will produce net benefits.

Unlike some of the other resources we have discussed, measuring the benefits of increased authority is more difficult. Conceptually, it is easy to argue that a teacher with more authority over curriculum and individual teaching methods will be more effective than a teacher who is forced to teach within severe constraints imposed from above. As a practical matter, however, it is exceedingly difficult to demonstrate this proposition with hard, quantifiable evidence.

There is, however, one way to use the concepts we have been discussing to evaluate the wisdom of relying more heavily on teachers to make decisions. If it can be shown that teachers can make a particular decision as quickly (or more quickly) and as wisely as more highly paid administrative personnel, substituting teaching FTE for administrative FTE will produce savings that can be used in other ways to improve working conditions and teacher effectiveness. There are, of course, limits on the amount of time teachers can spend on decision making and other administrative matters, but as long as the benefits exceed the costs, this is a useful, efficient strategy to pursue.

Knowledge

Improving teachers' knowledge about students, student outcomes, and the profession at large does undoubtedly increase effectiveness, but we are extraordinarily inadept at accomplishing this aim. Teachers have a very low regard for most of what passes for staff development and in-service training in public education. Our schools would benefit significantly from a careful examination of what these activities cost and what benefits they really produce. While the benefits may prove difficult to quantify, the costs are not, and a good accounting would be a valuable first step.

As noted earlier, many of the costs of staff development are not immediately obvious. Schools will have records on what it costs to attend staff development activities and what suppliers were paid to provide it, but these are but a fraction of the total costs of staff development. Probably the most significant cost is the time of the teacher attending or the cost of the substitutes who take over classes while teachers attend. Additionally, to the extent that salary increases are tied to certain types of professional development activities, they represent additional costs. When the full costs of these activities are added up, most schools are likely to be surprised at what they are spending.

Are these expenses worth it? Many teachers don't think so, and if they are right, these resources could be better deployed. Much of the time devoted to in-service training, for example, might be better spent on planning and counseling or on greater teacher involvement in decision making. Alternatively, some of the time teachers spend in staff development might be better used trying to determine how to improve these development activities. Figuring out what works and why is a crucial first step before spending more money to provide more development activities.

In Summary

In this paper we have been primarily concerned with demonstrating a way of evaluating the costs and benefits of different strategies for improving working conditions and the effectiveness of teachers. You may or may not see much promise in some of the examples we have used, but we hope you will see some value in the methodology for sorting out which strategies are likely to be most effective. Unfortunately, many of us take the view that applying economic ways of thinking to public school spending is simply a mindless attempt to cut spending to the bone. Used properly, however, these methods can improve the allocation of resources in schools in ways that make everyone better off. Indeed, we have tried to show that many of the strategies for improving working conditions are not nearly as costly as one might first believe. Much can be accomplished by using what we already have more efficiently. Seen in this light, the question is not, Can we afford to improve working conditions? It is quite simply: Can we afford not to?

Appendix

Introduction

This Appendix provides major sections of data from the Conditions and Resources of Teaching (CART) in tabular form for reference. The data are presented as percentages of the total sample responding in a particular way to a given question. The base of each percentage is approximately 1,787 NEA teacher members, the number responding to the survey. While the number responding to a given item may be fewer than 1,787, it is generally no fewer than 1,772.

The survey was mailed to a random sample of 2,530 NEA members in the spring of 1985. The 1,787 replies constitute a response rate of 71 percent. The maximum sampling error associated with percentages presented in this Appendix is 2.3 percentage points.

Decision Making

Teachers were asked to indicate how often they *actually have* the opportunity to participate in nineteen areas of decision making. They were also asked how often they thought they *SHOULD HAVE* the opportunity to participate. The results are presented below.

TABLE 1.
DECISION MAKING

	Actual Opportunities				Desired Opportunities			
	Seldom or never %	Occa-sionally %	Often %	Always or almost always %	Seldom or never %	Occa-sionally %	Often %	Always or almost always %
Organizational Policies								
Designing or planning the use of facilities ..	46.1	27.3	18.4	8.2	4.1	26.7	45.8	23.5
Budget development	60.6	21.6	11.6	6.2	8.8	32.0	42.2	16.9
Expenditure priorities	53.2	26.2	13.4	7.2	6.0	26.2	45.2	22.6
Staff hiring	83.0	11.1	4.3	1.6	28.5	43.6	21.5	6.4
Standardized testing policies	66.9	20.9	8.3	4.0	4.3	18.4	47.3	29.9
Procedures for reporting student achievement/progress to parents	19.5	28.6	30.2	21.7	0.7	5.2	32.5	61.7
Student/Teacher Interface								
Removing students from your classroom for special instruction or assistance	16.4	35.6	30.3	17.7	1.2	9.0	41.6	48.2
Student discipline codes	26.9	34.3	27.0	11.9	1.1	9.0	41.7	48.1
Grading policies	27.8	33.0	24.4	14.8	1.1	5.4	35.4	58.2
Student rights	38.0	32.6	21.7	7.6	2.3	13.2	48.6	35.9
Teacher Evaluation and Development								
Evaluations of your performance	27.4	28.9	22.4	21.3	1.6	8.2	32.0	58.2
Staff development opportunities offered by your school/school district	23.5	36.0	27.3	13.2	0.9	8.1	39.0	52.0
Work Allocation								
The school to which you are assigned	25.4	28.1	23.6	22.9	1.9	14.5	35.2	48.5
The subject(s) or grade level(s) you are assigned to teach	17.8	25.7	28.0	28.5	1.0	6.1	33.0	59.9
Assignment of students to your class(es)....	54.3	24.3	12.7	8.7	6.4	35.6	41.0	17.1
Teaching Process								
What to teach	13.8	24.6	34.6	27.0	0.8	4.3	32.0	62.9
How to teach	8.7	16.1	31.2	44.0	1.0	2.1	20.1	76.8
The textbooks and workbooks that will be available for use	10.0	24.1	32.2	33.7	0.6	2.9	26.6	70.0
The specific textbooks and workbooks that you will use in your class(es)	9.3	22.3	29.1	39.3	0.5	2.0	22.0	75.5

Communication with Building-Level Administrator

Teachers were asked several questions concerning the frequency, nature, and types of personal (one-to-one) communication they have with their building-level administrator. They were asked to base their responses on their experiences with the building-level administrator who was their direct supervisor. The following tables show their responses.

TABLE 2.
FREQUENCY OF COMMUNICATION WITH BUILDING-LEVEL ADMINISTRATOR

Several times a day	19.1%
Once or twice a day	27.1%
A few times a week	28.6%
Once a week	7.4%
Less often than weekly	17.8%

TABLE 3.
INITIATION OF CONTACT WITH BUILDING-LEVEL ADMINISTRATOR

Almost always initiated by building-level administrator	2.9%
Generally initiated by building-level administrator	4.2%
Initiated about as often by administrator as by you	62.2%
Generally initiated by you	21.8%
Almost always initiated by you	8.9%

TABLE 4.
NATURE OF THE CONTACT WITH BUILDING-LEVEL ADMINISTRATOR

	Seldom or never %	Occasionally %	As often as not %	Frequently %	Almost always %
Supportive Communication					
Clarifies what is expected of you	19.6	31.7	19.3	17.0	12.4
Shows appreciation for your work	15.2	28.0	15.1	28.7	13.0
Shows confidence in you	7.2	16.6	13.8	31.7	30.7
Assigns you specific tasks	10.4	33.0	18.4	29.7	8.6
Explains things	11.0	25.9	22.3	27.2	13.6
Gives helpful information or suggestions	17.8	28.9	19.6	22.9	10.8
Asks for your suggestions or opinions	19.9	25.2	18.5	25.8	10.6
Asks you for information, clarification, or explanation	12.1	30.0	24.2	25.5	8.2
Unsupportive Communication					
Criticizes your ideas or plans	68.1	22.5	6.5	2.1	0.8
Criticizes things you do	74.7	16.1	4.1	2.2	0.8
Questions your personal competence	92.2	4.8	1.7	0.8	0.4
Refuses to help when asked	81.6	12.3	3.1	2.2	0.8
Is unnecessarily formal	72.3	15.9	5.6	3.6	2.6
Gives excess, unnecessary information or comments	59.8	22.1	7.3	7.0	3.8

TABLE 5.
TYPE OF COMMUNICATION WITH BUILDING-LEVEL ADMINISTRATOR

	Seldom or never %	Occasionally %	As often as not %	Frequently %	Almost always %
Instructional problems and techniques	21.3	41.2	17.4	17.9	2.2
Student behavior	6.8	29.3	19.9	38.0	6.0
Subject matter and course content	27.8	38.7	16.4	13.6	1.5
Administrative procedures	35.1	36.5	15.5	11.8	1.1
School goals, objectives, and priorities	24.1	40.4	19.0	14.6	1.9
Teacher-parent relationships	15.1	41.2	21.3	20.0	2.3
Community relations	33.0	35.7	16.5	12.9	1.9
Your own performance	19.9	45.4	19.7	12.9	2.1
Student achievement	10.8	31.4	23.9	29.7	4.2
Your need for staff resources	31.3	35.3	20.5	11.4	1.5
Your need for equipment, supplies, and other	18.6	38.3	21.2	18.9	2.9
Your personal career plans/goals	49.1	32.3	10.9	6.5	1.2
Your personal training needs	54.8	30.5	8.9	5.2	0.7
Adjustments in your assignments or work schedule	35.5	42.4	13.7	7.2	1.1
General concepts and philosophy of education	46.3	31.3	13.5	7.7	1.2
Matters of mutual personal interests that are unrelated to work	25.4	30.1	20.5	20.5	3.7

Resources

Respondents were asked two questions dealing with the extent to which insufficient resources created problems for them in doing their job during the 1984-85 school year. One question asked how often *insufficient quantity* had created problems; the other question asked how often *inadequate quality* had created problems. Responses to both are summarized below.

TABLE 6.
RESOURCES

	Insufficient quantity has created a problem:			
	Constantly %	Often %	Occasionally %	Not at all %
Supplies/Equipment				
Textbooks	4.2	7.4	27.6	61.6
Workbooks	6.7	8.7	22.2	45.2
Other published instructional materials	4.4	10.2	32.9	46.0
Instructional materials developed on your own	3.0	6.6	28.8	57.3
Instructional materials developed with or by other teachers	1.8	5.1	21.0	50.3
Audiovisual materials	5.2	11.2	35.3	44.4
Audiovisual equipment	5.9	10.2	32.6	47.7
General classroom supplies	4.8	12.0	36.7	44.6
Money to purchase supplies or equipment for special purposes	15.1	20.8	35.0	25.7
Space				
Classroom space	13.0	16.4	25.7	42.9
Space for special activities	15.6	19.9	28.8	30.2
Storage space	20.3	19.2	26.9	31.7
Time				
Time for direct instruction of students	9.7	20.1	40.1	28.9
Time for planning and preparation	23.3	25.1	31.1	19.8
Time for grading and reviewing student work	27.0	28.2	28.2	15.3
Time for counseling individual students	25.9	33.0	28.3	11.0
Time for attending professional workshops and conferences	9.7	18.5	39.1	30.4
Advice/Feedback				
Advice and feedback from building-level administrators	7.3	16.9	37.8	38.0
Advice and feedback from other teachers	3.5	12.2	39.9	42.3
Advice and feedback from staff specialists	6.4	14.9	34.9	35.9
Formal evaluations of your performance	4.0	7.7	23.8	62.4
Staff development opportunities provided by your school district	7.3	14.3	33.2	41.5
Information				
Information provided by standardized test results	4.1	10.1	28.7	47.0
Information resulting from tests developed on your own	1.0	3.9	18.4	66.5
Information resulting from tests developed with or by other teachers	1.1	3.9	15.3	48.7
Information contained in school and departmental files	2.3	7.1	28.1	57.4
Information contained in your own resource files	0.9	4.8	21.3	68.3

TABLE 6. (CONTINUED)

	Insufficient quantity has created a problem:			
	Constantly %	Often %	Occasionally %	Not at all %
Assistance				
Assistance from student teachers	5.9	3.7	7.4	25.7
Assistance from teacher aides	12.3	10.0	14.5	25.9
Assistance from secretarial or clerical staff	7.5	11.0	26.7	48.7
Assistance from staff or school district specialists	6.3	12.7	34.8	37.4
Assistance from other teachers	2.1	6.8	31.7	53.3
Assistance from custodial staff	6.0	11.5	31.2	49.5
Assistance from building-level administrators	5.8	11.8	39.1	41.5

	Inadequate quality has created a problem:			
	Constantly %	Often %	Occasionally %	Not at all %
Supplies/Equipment				
Textbooks	4.0	11.2	32.5	46.8
Workbooks	4.2	9.8	24.7	46.0
Other published instructional materials	3.1	8.5	35.3	47.8
Audiovisual materials	5.7	13.6	32.8	44.8
Audiovisual equipment	6.1	12.4	32.7	46.3
General classroom supplies	4.5	10.9	34.5	48.8
Space				
Classroom space	10.3	15.6	28.2	44.7
Special activities space	12.1	18.0	28.4	34.9
Storage space	16.1	18.0	26.9	37.5
Time	Not Applicable			
Advice/Feedback				
Advice and feedback from building-level administrators	7.0	13.2	36.4	42.0
Advice and feedback from other teachers	2.3	5.8	34.9	54.5
Advice and feedback from staff specialists	5.2	9.4	33.3	43.7
Formal evaluations of your performance	4.4	8.3	24.6	60.8
Staff development opportunities provided by your school district	7.5	15.0	33.6	39.8
Information				
Information provided by standardized test results	3.4	10.5	30.2	47.2
Information resulting from tests developed on your own	0.6	2.4	23.7	65.8
Information resulting from tests developed with or by other teachers	1.0	3.1	19.5	49.5
Information contained in school and departmental files	2.3	6.1	32.2	55.4
Information contained in your own resource files	0.5	2.9	27.5	65.8
Assistance				
Assistance from student teachers	3.4	2.3	8.6	25.4
Assistance from teacher aides	6.7	6.0	15.2	30.2
Assistance from secretarial or clerical staff	5.0	6.9	26.2	55.3
Assistance from staff or school district specialists	5.6	10.0	34.2	41.3
Assistance from other teachers	1.6	4.8	31.9	57.0
Assistance from custodial staff	6.5	9.4	31.4	51.2
Assistance from building-level administrators	6.0	10.9	37.6	44.1

Sources of Knowledge and Skills

Teachers were asked to evaluate, based on their own personal experience, the effectiveness of fourteen sources of knowledge and skills needed in their current teaching situation. The table below presents their evaluation of each source, listed in descending order based on the proportion considering the item definitely effective.

TABLE 7.
SOURCES OF KNOWLEDGE AND SKILLS

	Effective in providing you with knowledge and skills			
	Definitely effective %	More effective than ineffective %	More ineffective than effective %	Definitely ineffective %
Direct experience as a teacher	91.5	7.8	0.2	0.1
Consultation with other teachers	52.2	42.1	3.9	0.7
Your observation of other teachers	49.5	40.8	5.0	0.5
Study and research pursued on your own	46.1	43.0	2.8	0.3
Graduate courses in field of specialization	36.7	37.3	9.7	1.9
Consultation with grade-level or subject-matter specialists	31.5	39.0	10.9	2.4
Undergraduate courses in field of specialization	30.7	44.0	15.9	3.6
Professional conferences and workshops (other than those classified as in-service training)	23.9	53.2	14.4	2.3
Professional journals	19.7	56.5	17.4	1.5
Graduate college courses in education	19.0	40.3	21.6	7.0
Formal evaluation of your performance	16.0	44.9	26.6	9.7
Consultation with building-level administrators	14.9	44.2	28.6	8.6
Undergraduate education courses	13.0	39.7	31.8	11.2
In-service training provided by your school district	12.9	40.3	31.0	12.3

Job Satisfaction

Teachers were asked to indicate how satisfied they were with nine aspects of their job. The results are presented in the following table.

TABLE 8.
JOB SATISFACTION

	Very satisfied %	Somewhat satisfied %	Somewhat dissatisfied %	Very dissatisfied %
The recognition you receive from colleagues for the work you do	34.7	49.2	12.7	3.4
The recognition you receive from administrators for the work you do	31.5	35.2	21.1	12.2
The recognition you receive from parents for the work you do	30.0	39.2	22.5	8.3
The recognition you receive from your current students	39.9	42.3	14.3	3.5
The recognition you receive from your former students	50.3	40.3	7.5	2.0
The authority you have to carry out your work	42.6	42.1	11.9	3.5
Your present job in light of your career expectations	36.6	40.2	17.6	5.5
The chance your job gives you to do what you are best at	41.9	38.2	15.7	4.3
The extent to which conditions in your school enable you to be effective in your job	26.1	46.3	20.5	7.0

Demographic Characteristics

The following data describe the demographic characteristics of respondents to the CART survey.

TABLE 9.
DEMOGRAPHIC CHARACTERISTICS

Assignment Level	
Elementary	47%
Middle and junior high	22
Senior high	28
Other	2
Highest degree held	
Bachelor's	45%
Master's	47
Higher than Master's	7
Gender	
Male	29%
Female	71
Location of school where employed	
Inner core of city	8%
Other part of city	10
Suburban	32
Small town (not suburban)	35
Rural	16
Total years of teaching experience	
Less than 5 years	8%
5–9 years	17
10–14 years	27
15–19 years	21
20 years or more	28
Total years teaching in present school	
Less than 5 years	31%
5–9 years	27
10–14 years	21
15–19 years	13
20 years or more	8

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